

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

**BY
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**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
THE DEGREE OF MASTER OF SCIENCE IN FINANCE, SCHOOL
OF BUSINESS, UNIVERSITY OF NAIROBI**

DECEMBER, 2018

DECLARATION

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

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

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DEDICATION

This research project is dedicated to my family and friends for their financial and moral support throughout the time of study.

ACKNOWLEDGEMENT

I thank Almighty God for granting me great guidance, energy, wisdom, academic intellect and finances which enabled me to accomplish this work. Secondly, my deepest appreciation and thanks goes to my supervisor Dr. Cyrus Iraya and my moderator Dr. Winnie Nyamute for their constructive suggestions, right criticisms and guidance that helped me stay on course and to finish this scholarly work. I am also deeply indebted to my friends and course colleagues for their contributions in various ways towards the completion of this work.

TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENT.....	iv
LIST OF TABLES.....	vii
LIST OF FIGURES.....	viii
LIST OF ACRONYMS AND ABBREVIATIONS.....	ix
ABSTRACT.....	x
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.1.1 Working Capital Management.....	2
1.1.2 Financial Performance.....	3
1.1.3 Working Capital Management and Financial Performance.....	4
1.1.4 Companies Listed at the Nairobi Securities Exchange.....	5
1.2 Research Problem.....	6
1.3 Research Objective.....	7
1.4 Value of the Study.....	7
CHAPTER TWO: LITERATURE REVIEW.....	8
2.1 Introduction.....	8
2.2 Theoretical Review.....	8
2.2.1 Cash Conversion Cycle Theory.....	8
2.2.2 Operating Cash Theory.....	9
2.2.3 Transaction Cost Economics Theory.....	10
2.2.4 The Miller-Orr Model of Approach.....	10
2.3 Determinants of Financial Performance.....	11
2.3.1 Working Capital Management.....	11
2.3.2 Leverage.....	12
2.3.3 Macroeconomic Factors.....	12
2.3.4 Corporate Governance.....	13
2.4 Empirical Review.....	13
2.5 Conceptual Framework.....	16

2.6 Summary of Literature Review.....	16
CHAPTER THREE: RESEARCH METHODOLOGY	17
3.1 Introduction.....	17
3.2 Research Design.....	17
3.3 Population and Sample	17
3.4 Data Collection	17
3.5 Data Analysis	18
3.6 Test of significance.....	18
CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATION ...	19
4.1 Introduction.....	19
4.2 Descriptive Statistics.....	19
4.4 Correlation Analysis	20
4.4.1 Regression Analysis.....	21
4.5 Interpretation of the Findings.....	23
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	24
5.1 Introduction.....	24
5.2 Summary of the Findings.....	24
5.3 Conclusions.....	25
5.4 Recommendations.....	26
5.5 Limitations of the Study.....	26
5.6 Suggestions for Further Research	27
REFERENCES.....	28
Appendix I: List of Companies Listed at NSE	31

LIST OF TABLES

Table 4.1: Descriptive Statistics Analysis.....	19
Table 4.2: Correlation Matrix.....	20
Table 4.3: Model Summary.....	21
Table 4.4: Summary of One Way ANOVA	21
Table 4.5: Regression Coefficients	22

LIST OF FIGURES

Figure 2.1: Conceptual Framework	16
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LIST OF ACRONYMS AND ABBREVIATIONS

CCC	Cash conversion cycle
DCP	Debtors Collection Period
NSE	Nairobi Securities Exchange
WCM	Working Capital Management

ABSTRACT

Working capital management is key to prosperity of any business organizations. Business firms in all sectors are prone to high degree of external business environment and industry structures change. The main objective of this paper was to determine the impact of working capital management on the financial performance of the firms quoted under the Nairobi Securities Exchange. This paper employed descriptive study design with the targeted population constituting 65 companies quoted under the Nairobi Securities Exchange. However, the paper only covered 20 of the targeted firms quoted under the NSE. Data was analyzed on the basis of the mean and the F test statistic was computed at 5% significance level and Analysis of Variance (ANOVA). From the regression analysis, the study confirmed that four independent variables that were studied which included leverage, inventory turnover ratio, firm size and liquidity explain 11.5% of the variability with the financial performance as represented by adjusted R^2 . The study therefore concluded that working capital management affects the financial performance of the companies quoted at the Nairobi securities exchange. The study recommends the meeting of the short term obligations whenever they are due, this guarantees trust from the creditors which translates to improved financial performance.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The planning and the control of the receivables and payables of any business entity determine their survival and their profitability (Hampton, 1989). Working capital is a powerful tool in any business organization due to the impact it has on the financial performance. The concept of working capital management seeks to address how business entities should prudently manage their accounts receivables and accounts payables to promote a satisfying liquidity in the planning, acquiring and usage of the assets which are more liquid to cater for the business needs. Working capital management has acquired increasing corporate importance in recent times due to its significance. Working capital should be managed efficiently to increase the returns of the firms.

In relation to the conversion cycle, by ensuring the cash conversion cycle is shorter, the cash is received very quickly by an entity (Gitman, 1974). Cash conversion cycle helps us to establish the necessary optimal cash to be maintained in a business entity. Cash conversion cycle is pivotal in the management of working capital, it will indicate the proper time frame for the purchase of inventories. According to transaction cost economics theory, the optimal stock level is arrived at by analyzing the costs and benefits of stock (Williamson, 1975). Firms should maintain optimum inventory by monitoring what to order and how much to order. 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). Operating cash theory argues that the collection policy adopted by any firm and the credit policy will have a direct effect on the general of the firms (Fama, 1979).

Listed companies have strategized on the investment in securities which are marketable to gain the returns from the idle cash. Working capital management ensures that accounts receivables are collected as soon as possible and nonpaying debts are written off as bad debt. It will also ensure the business entity maintains adequate cash to keep an entity more liquid and any idle money is put into viable investments and by so doing the financial performance is improved(Horne, 2005).

1.1.1 Working Capital Management

This is the monitoring of cash, marketable securities, and inventory of a business entity (Hampton, 1989). It encompasses fixed working capital which is a number of account receivables needed to cater for the company's long-term requirements and variable working capital which implies a number of current assets that change with seasonal needs. It is pivotal in ensuring the company's payables, receivables and inventories are well managed, this will lead to improved financial performance and maximization of the shareholder's wealth.

Good Working capital management practices will ensure efficient cash management by determining and maintaining optimum cash levels in business, and ensures that customers settle their accounts in time, a business must ensure that customer payments are transmitted into their bank accounts in time. This will ensure that the lodgment delay is kept at a minimum. Cheques should be banked on the day of receipt. Cash should also be banked daily depending on the daily inflow, security and distance to the bank. These will reduce cost in interest lost and the interest cost of overdraft cash in hand is a non-earning asset as it does not generate interest income. Moreover, holding too much cash is a risk as

it may be embezzled. Holding cash in hand will call for an entity to incur extra cost in ensuring the safety of that cash. All these activities are non-value adding and should be kept as minimum as possible. However, to minimize the risk of insolvency, it is important to maintain adequate liquidity to meet the demand of creditors as they fall due(Shin, 1998).

Trade credit provides business entities with the ability to obtain economic value pending future payment. The creation of trade credit and this will be exchanged for cash. The business credit is managed by accounts receivables, offering sales on credit is a common method by many organizations and accounts receivables is one of the most important asset in business entity's statement of financial position. This objective will be achieved by accounts receivables collection policy which should be efficient (Hampton, 1989).

1.1.2 Financial Performance

Wood (1989) defines the above as the measurement of the organization's policies in monetary terms. Pandey (2008) defines financial performance as the process of measuring how efficiently a business entity has utilized its resources. The financial performance is normally reflected in the firm's profitability ratio. Business entity's profits has always been recognized as the main indication of productive business ventures. Business ventures can be evaluated in terms of net income generation activities in relation to amount of capital invested. It is against this idea that financial analysts invented profitability ratios which are applied in the measurement of the capacity of the business entities to turn sales into incomes and generate incomes on assets utilized. Profitability ratios indicate the extent of success in realizing profit levels.

Any organization in the world is in business for prosperity to greater heights; for any business entity to prosper, it must ensure the financial health at all times (Heremans, 2007). Business organizations can gauge the success of the entities through the analysis of the overall output in monetary terms and this aims at determining how the resources have been employed effectively and efficiently in the organizations. Any business entity can know the worth of their entities in relation to growth by employing either the modern or traditional performance measures.

Liquidity ratios, on the other hand, shows the extent of business entities' liquid levels. Liquidity ratios indicates the capacity of the firms to cater for the current liabilities due. Acid test ratio and current ratios are examples of liquidity ratios. Current ratios indicates that provided accounts payables and accounts receivables are settled at same period of time, an assumption can made on the decision to determine if the business has enough liquid resources to settle its accounts payables. Financial performance of business entities is determined from the published financial statements of the business entities (Wood, 1989).

1.1.3 Working Capital Management and Financial Performance

The fundamental aim in managing any working capital is to ensure prudent sound strategies of current assets and current liabilities in a business entity, this will in turn improve the shareholder's wealth. To achieve the working capital objectives, business entities can adopt aggressive, moderate and conservative management policies. Under the aggressive policy, business entities employs more of short-term funds .This approach will bring about an increase in liquidity risk and cash flow challenges but there is the

likelihood of profitability increase since short term finances are cheaper. Profitability and liquidity risk are moderate under the conservative approach, the firm will employ less short term finances (Padach, 2006).

The financing of all noncurrent assets and permanent assets is through the available funds. During this period the firm invests extra capital in marketable securities and profitability levels are low since long term source is expensive. According to the operating cycle theory (Fama, 1979), the collection policy adopted by any firm and the credit policy will affect the financial performance of business entities involved.

1.1.4 Companies Listed at the Nairobi Securities Exchange

Nairobi Securities Exchange was constituted when Kenya was a British colony in 1954. as at July 2018, NSE recorded a market capitalization of about 2,156.8 billion (NSE, 2018). Nairobi Securities Exchange is critical in the economic development in Kenya due to its investment platforms which has attracted more investments in a variety of its segments from the surplus spending units thus promoting economic growths. Kenyans have also been offered opportunities to trade their shares with minimal obstacles hence improved economic development.

Nairobi Securities Exchange has enabled the trading of various financial instruments which include debt, equities and derivatives. It is also mandated in the core function of listing the companies which have met the minimum requirements for listing. Majority of the companies listed at NSE have capitalized on working capital management so as to raise financial performance. With the adoption of good working capital management strategies, the firms have recorded higher financial results than those which have not.

1.2 Research Problem

Padach(2001) asserted that working capital management is key to prosperity of any business organizations. Business firms in all sectors are prone to high degree of external business environment and industry structures change. The complex market place where goods and services are produced or delivered has greatly contributed to market competition (David& Sabine, 2006). Hence the need for working capital management to deal with the global competition in the business environment to improve the financial performance.

Working capital management strategies are on the rise in Kenya today, many companies listed at the Nairobi Securities Exchange have put more emphasis on working capital management strategies which are aimed at positively influencing the financial performance. Such strategies include; paying account payables when due and maintaining the credit terms agreement, taking advantage of any discounts offered by the suppliers, collection of receivables when due and turn over inventories as quickly as possible but avoid stock out cases that may arise. All this is aimed at improving the financial performance (NSE, 2015).

Many studies have been conducted on working capital,Adanu (2010) concluded that accounts payable and accounts receivables were statistically insignificant and had no influence on the fiscal performance of Nigerian firms. Ajir (2013) concluded that management of working capital positively influenced the profitability of the commercial banks quoted in Indonesia. Shin (1998) concluded thataccounts payables had an impact on fiscal performance of the firms in South Africa.

Nyaboke(2012) suggested that the management of working capital had insignificance effect on fiscal performance. Kimani (2015) concluded that working capital management had a strong positive influence on fiscal performance. The primary problem of many papers is that the period of study was short and the sample size was limited. Therefore, the current study was to answer this study question; what is the impact of working capital management on the financial performance of the firms quoted under the Nairobi securities exchange?

1.3 Research Objective

The objective of this paper was to establish the effect of working capital management on the financial performance of the firms quoted under the Nairobi Securities Exchange.

1.4 Value of the Study

This study is of great use to the staff and management of companies, they will gain insight on how well to manage their working capital since it is believed to positively impact financial performance of the companies. The management will be able to adopt good strategies for managing working capital.

The paper is of significance to the regulators of the listed companies for example the capital markets authority which is mandated in the establishment of rules governing capital markets. This will ensure the companies operate under the laid down rules.

Finally, the study is of great value to the academic research by acting as a source of empirical references, literature, and ground for further research to the academic research with knowledge regarding working capital management.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The section comprises the theoretical review, determinants of the financial performance, empirical literature, conceptual framework and ends with the summary of literature review which highlights key observations from the theoretical review and the research gaps thereafter.

2.2 Theoretical Review

The following theories are relevant to working capital management and therefore discussed. Cash conversion cycle (Gitman, 1974) which asserts that when the cash conversion cycle is shorter working capital is better. Operating cycle theory (Fama, 1979), transaction cost economics theory (Williamson, 1975) which states that the optimal level of stock is arrived at by analyzing the costs and benefits of the stock and the miller-orr model approach (Miller-orr, 1996) which asserts that setting up the up and lower limits of cash balances depends on the variance of the net cash flows.

2.2.1 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.

Cash conversion cycle plays a role in the management of working capital, 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).

2.2.2 Operating Cash Theory

Fama(1979) argues that the collection policy adopted by any firm and the credit policy have a potential of influencing the performance. Operating cycle theory incorporates the company's account receivable turnover and the stock turnover. Accounts receivables turnover shows the frequency with which debtors were changed into cash. Inventory turnover on the other hand, indicates the frequency with which inventories were converted to sales.

It is the responsibility of the management to evaluate the clients before they can sell on credit since too much credit will in turn adversely affect the financial performance. Good inventory management, on the other hand, is key to the profitability of the company. Companies should maintain the optimal level of its inventories. Maintenance of larger average receivables by many firms spanning a longer time period can lead to higher liquidity ratios which is capable of affecting the business entities negatively. Firms need to monitor the inventory management because it affects the financial performance in the long run(Fama, 1979).

2.2.3 Transaction Cost Economics Theory

According to this theory, the optimal stock level is arrived at by analyzing the costs and benefits of stock (Williamson, 1975). Transactions costs are those costs which firms incur without any knowledge of their existence. 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).

2.2.4 The Miller-Orr Model of Approach

The model was founded by Merton Miller and Daniel Orr in 1966, the idea was to produce an approach that was more practical to manage the cash. The approach manages to realize a reasonable degree of realism though not conclusive. It is based on the assumption that the relative variation and the mean are uniformly distributed with the value of zero. The firm can set the lower limit as per its needs of maintaining the optimal cash balances and the upper limit. If balances reach the upper limit, the company

purchases securities and the balance of cash returns to desired amounts. In case of persistent cash shortage, it indicates a state of under capitalization and the need for additional permanent capital and unless this is obtained the entity may be forced out of business.

When the pressure from creditors is high, the firm may reduce the quantity of stock carried forward and revising past investment decisions by divesting from non-core activities, subsidiary companies and loss making division and project or even the current assets needed for normal trading operations and accelerating cash inflows which would otherwise be expected in later periods like pressing debtors which might negatively affect the financial performance (Miller-Orr, 1996).

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, leverage, corporate governance and macroeconomic variables.

2.3.1 Working Capital Management

The management of working capital is monitoring of cash, marketable securities, and inventory of a business entity (Hampton, 1989). It encompasses fixed working capital which is a number of account receivables needed to cater for the company's long-term requirements and variable working capital which is an amount of current assets that change with seasonal needs. The working capital management is pivotal in ensuring the company's payables, receivables and inventories are well managed, this will lead to improved financial performance and maximization of the shareholder's wealth. Good

2.3.2 Leverage

Miller (1958) defines leverage as that fraction of debt in the overall financing option of the firm. 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, the use of debts in capital structure increases leverage because of the interest tax shield. The use of debts in the capital structure does not change the risk perceptions of the investors 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, have the positive impact on the financial performance.

2.3.3 Macroeconomic Factors

The macro economic factors affecting financial performance include inflation, economic growth, interest rates, political instability and international relations. Interest rates are the costs incurred by the borrowers of the credit from the commercial banks. When rates of interest increase, the business entities incurs more losses because an increase of the interest rate will lead to higher interest expense. Inflation which is the persistent increase in the prices of commodities also has a direct influence on the financial performance. Interest rate capping has negatively affected the business entities in Kenya. The companies have reported declined profits in the recent times. Political instability in the country also has a direct effect on the financial performance (Deloof, 2003).

2.3.4 Corporate Governance

Corporate governance involves the interrelationship of the various participants in improving the corporation performance and the manner it moves forward towards the achievement of objectives. It deals with determination of implementing corporate decisions aimed at improving the general welfare of the stakeholders. It offers the final authority and complete mandatory to all stakeholders. It ensures the interest of all the shareholders both the minority and the majority are safeguarded (Brigham, 1987).

It aims at promoting the efficiency, effectiveness and sustainable corporation that can contribute to the affairs of the society through wealth creation. Responsible corporations will ensure profits are maximized for the shareholders, this will ensure legitimate corporations that are governed with integrity and transparency by recognizing and protecting the rights of stakeholders. Sound corporate governance practices are associated with improved financial performance and vice versa (Brigham, 1987).

2.4 Empirical Review

Kimani (2010) researched on the impact of working capital management on the fiscal performance of insurance companies in Kenya between 2001 and 2007. A sample of 7 insurance firms was selected from a total of 5 insurance firms. The survey used secondary data obtained from the firm's websites. The study concluded that inventory turnover and accounts receivables had a strong positive impact on the fiscal performance of the insurance firms in Kenya. Sample size was limited in this study.

Shin and Soenen (1998) surveyed the financial performance of South African Companies performed under the influence of working capital management from 1994 to 1996. 1290

Companies were surveyed. Multiple linear regression models were also employed in the analysis. Different working capital management ratios were computed. They concluded that cash conversion cycle and accounts payables had a strong positive impact on the fiscal performance of the firms in South Africa. The period of research was short.

Oki (2005) surveyed the financial performance of the companies in Pakistan under the influence of working capital management. He used the sample size of 30 companies from a population of 70 manufacturing companies between 1998 to 2002. The survey utilized the secondary data from the websites of the companies and working capital management ratios computed. The study also employed the linear regression model in the analysis. From the analysis, he concluded that inventory and accounts receivable had a strong influence on fiscal performance of the manufacturing firms in Pakistan.

Lin (2014) surveyed the financial performance of the firms in India under the influence of working capital management. The study period was from 2000 to 2010. 340 pharmaceutical companies were considered but only 152 companies were selected as the sample. Also the study employed the linear regression model. From the study, he concluded that accounts receivable and accounts payables had a strong positive impact on the fiscal performance of the firms in India. The methodology was appropriate.

Adanu (2010) researched on the fiscal performance of firms in Nigeria under the influence of working capital management between 2006 to 2008. A sample of 103 pharmaceutical firms was selected from 314 pharmaceutical firms. The study used the secondary data to compute the working capital indicators which included the accounts receivables and accounts payables. The study also employed multiple regression models to show the

relationship between the study variables. They concluded that accounts payable and accounts receivables were statistically insignificant and had no influence on the financial performance of pharmaceutical companies in Nigeria. The study period was short.

Kithii (2008) did a survey on the impact of working capital management on the fiscal performance of Non-listed commercial Banks in Kenya between 2002 to 2006. The study aimed at establishing how the banks performed under the influence of WC. The study also employed a linear regression model in the survey. He concluded that working capital was insignificant on the financial performance.

Mwaniki (2013) investigated the impact of working capital management practices on the fiscal performance of selected firms quoted on the NSE between 2009-2012. The study relied on the secondary data which was readily available. The study also used the multiple regression models in the analysis. The paper made conclusion that average collection period had a considerable positive effect on the financial performance of the selected companies.

Gakure (2011) researched on the fiscal performance of the firms in Kenya under the influence of working capital management. The study targeted the insurance sector between 2008 to 2010. A sample of 8 insurance firms was selected from the population of 21 insurance companies. The study suggested that working capital management was negatively linked with the financial performance of the insurance companies.

2.5 Conceptual Framework

Independent Variable

Dependent Variable

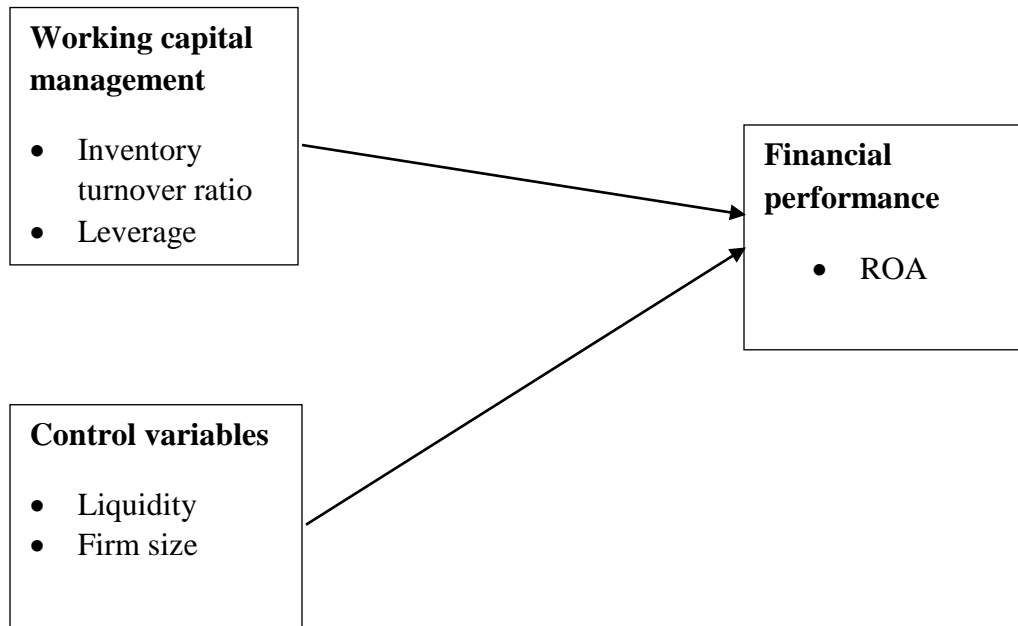


Figure 2.1: Conceptual Framework

2.6 Summary of Literature Review

The literature review encompasses the theories that were reviewed which included; cash conversion cycle theory (Gitman, 1974) operating cycle theory (Fama, 1979), Transaction cost economicstheory(Williamson, 1975) and the Miller –Orr model approach (Miller-Orr, 1996), determinants of financial performance and the empirical review which include Kithii (2008), Adamu (2010), (Gakure, 2011), Makori(2015), Mwaniki(2013), Ajir(2013), Lin(2014), Shin and Soenen(1998) and Kimani(2010), From the literature reviewed, the period of study was short and the sample size was limited, hence there was the need for the current study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The section covers the procedures which were followed to conduct the study. The section begins by setting out the research design that was used, the population of the study, the method that was employed to collect data and the analysis of the data that was collected.

3.2 Research Design

The research design is the method of conducting research (Mugenda, 2005). This study employed descriptive research design since it helped in description of the variables that were employed. Regression analysis was also be employed.

3.3 Population and Sample

Population constitutes a collection of items that need to be analyzed (Mugenda, 2005). 65 listed companies formed the population of the study from which 30 companies were obtained as the sample of the study.

3.4 Data Collection

Secondary data was utilized in this paper and was acquired from the NSE and capital markets authority for analysis in the period of study 2013 to 2017. Data that was collected include; net income, total assets, cost of sales, opening inventory, closing inventory, current assets and current liabilities.

3.5 Data Analysis

Data analysis entails the basic procedures employed in bringing order and meaning to the data to be gathered. Secondary data was analyzed by use of the descriptive statistics in terms of the mean values. The following linear regression model was used:

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + e$$

Where Y was the financial performance= ROA

β_0 is the free term of the equation. $\beta_1, \beta_2, \beta_3$ and β_4 are the coefficients of independent variables and they measure the responsiveness of Y to unit change in variable x.

x_1 = Leverage=total liabilities/total assets

x_2 = Inventory turnover ratio=cost of sales/average inventory

x_3 = Firm size = Natural logarithm of total assets

x_4 = Liquidity= current assets/current liabilities

e = the error term

3.6 Test of significance

An F-test at 5% significance level was conducted to determine the strength of the model, a t-test was also used to describe the sample that was measured.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

This section provides the analysis of the data obtained. The study applied the secondary data of the listed companies. In section 4.2 data was analyzed in terms of descriptive statistics and in section 4.3 and 4.4 data was analyzed in terms of inferential statistics and section 4.4 presented discussions of the findings.

4.2 Descriptive Statistics

The independent factors analyzed here included leverage, inventory turnover ratio, liquidity and firm size while the dependent variable was the return on assets. The minimum values, means, maximum values and the standard deviations of the factors under study were tabulated as shown below.

Table 4.1: Descriptive Statistics Analysis

Variable	N	Minimum	Maximum	Mean	Standard deviation
Inventory turnover ratio	150	0.41	12.20	4.11	2.42
Firm size	150	8.39	20.07	10.01	1.41
leverage	150	0.15	1.14	0.55	0.20
liquidity	150	0.00	1.25	0.09	0.20
Return on assets	150	-0.12	0.47	0.09	0.10

From the findings, the minimum number of inventory turnover ratio was 0.41, the maximum number was 12.20, the mean was 4.11 and the standard deviation was

2.42 which indicated a moderate variation in the inventory turnover ratio. The minimum number of firm size 8.39, the maximum number was 20.07, the mean was 10.01 and the standard deviation was 1.41 which show the large variations. The minimum number of leverage was 0.15 the maximum number was 1.14, the mean was 0.55 and the standard deviation was 0.2 which shows a small variations. The minimum number of liquidity was 0.00, the maximum number 1.25, the mean was 0.09 and the standard deviation was 0.2 which shows a small variations. The minimum number of return on assets was -0.12, the maximum number was 0.47. The mean was 0.09 and the standard deviation was 0.1 which shows a small variation.

4.4 Correlation Analysis

Table 4.2: Correlation Matrix

		Liquidity	Inventory Turnover Ratio	Leverage	Firm Size	Return On Assets
Liquidity	Pearson correlation Sig. (2-tailed) N.	1 150				
Inventory turnover ratio	Pearson correlation Sig. (2-tailed) N.	0.356 0.000 150	1 150			
leverage	Pearson Correlation Sig. (2-tailed) N.	0.646 0.000 150	0.021 0.802 150	1 150		
Firm size	Pearson correlation Sig. (2 –tailed) N.	-0.014 0.865 150	0.069 0.400 150	-0.096 0.242 150	1 150	
Return on assets	Pearson Correlation Sig. (2-tailed) N.	0.256 0.002 150	-0.152 0.064 150	0.069 0.399 150	0.233 0.004 150	1 150

From the table a above,liquidity and financial performance were confirmed to be positively related the relationship was significant. The correlation coefficient was 0.256 and the p-value was 0.002 which is less than 0.05. The findings showed further that

inventory turnover ratio was negatively related to financial performance, leverage was positively linked to financial performance and firm size was positively linked to financial performance and the effect was significant since the correlation coefficient was 0.233 and the p value was 0.004 which is less 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	0.373	0.139	0.115	0.096

The value of the correlation coefficient from the table above is 0.373 which implies that a weak positive connection is there among the study variables. The adjusted R square is 0.115 this is to the implication that 11.5% of the influence of liquidity, leverage, inventory turnover ratio and firm size is explained by the model.

Table 4.4: Summary of One Way ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.214	4	0.054	5.843	0.000
	Residual	1.329	145	0.009		
	Total	1.543	149			

The results in table above shows the value of F statistic was 5.843 at 5% significance level and the statistic was significant, the P-value was 0.000 which is less than 0.05 implying that the overall model was significant.

Table 4.5: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-0.122	0.064		-1.907	0.059
	Liquidity	0.118	0.042	0.232	2.812	0.006
	Inventory turnover ratio	-0.004	0.003	-0.089	-1.072	0.286
	Leverage	0.054	0.040	0.104	1.337	0.183
	Firm size	0.018	0.006	0.252	3.247	0.001

The findings of the regression analysis show that liquidity is positively related to financial performance. It implies that any unit increase in the liquidity will lead to an increase in the financial performance by 0.118. Inventory turnover ratio will lead to decrease in the financial performance. Inventory turnover ratio is negatively related to financial performance. This is to the implication that increase in Inventory turnover ratio would lead to decrease in the financial performance. Leverage is directly related to the financial performance, this implies that increase in leverage will lead to an increase in financial performance, Firm size is directly related to the financial performance which implies that as the size of the firms increase, financial performance increases by 0.018 units.

The standardized beta coefficient of Inventory turnover ratio was -0.089 which means that Inventory turnover ratio has strong effect on the financial performance. The standardized beta coefficient of liquidity was 0.232 which implies that liquidity has a weak influence on fiscal performance, the standardized beta coefficient of leverage was 0.104 meaning a moderate influence of Leverage on fiscal performance.

4.5 Interpretation of the Findings

From the descriptive statistics, the sizes of the companies were on an increasing trend and a small variation was confirmed in terms of their growth. Growth of the assets of the firms can be attributed to 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.

From the regression analysis results the research established that working capital variables affected the financial performance and they include leverage, liquidity, inventory turnover ratio and firm size. The four independent variables which were analyzed which included leverage, liquidity, inventory turnover ratio and firm size were able to explain their effect on the financial performance up to 11.5% as shown by adjusted R square. This implies that the four independent variables inputs 11.5% on the financial performance and the remaining 88.5% is contributed by the factors not studied.

This research found out that the coefficient of inventory turnover ratio was -0.004 meaning that inventory turnover ratio negatively influences financial performance. The coefficient of liquidity 0.118 meaning that liquidity positively influences the financial performance which means that as the liquidity increases, the financial performance increases. Leverage was established to be positively linked with the financial performance this is evident from the value of the coefficient of 0.069. In general, working capital affects the financial performance. This study concurs with the researches by Shin and Soenen (1998) who suggested that working capital affects economic performance of the companies in South Africa.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The section provides a summary, conclusions, recommendations for policy, limitations of the research and suggested fields for further studies.

5.2 Summary of the Findings

This study aimed at assessing the ultimate effect of working management and how it affected the financial performance of the firms. The study confirmed a positive relationship among the firm's size and the financial performance. The size of the firm is a major indicator of its ability to survive in a competitive environment. Larger firms have been confirmed to be more profitable than small firms due to the benefits of economies of scale. The study further confirmed that leverage was positively related to the financial performance. Leverage deals with debt financing by the business entities. Debt can be useful but can also be risky depending on how the firms utilize it. Proper utilization of debt improves the financial performance.

Liquidity was confirmed to be positively linked to fiscal performance. Liquidity of the firms shows how first the obligations of the firms are settled. Firms that settle dues first are more profitable than the firms which take longer period of time to settle their obligations. Delay in the settlement of the obligations can cause the lack of trust from the creditors which can have an adverse effect on the financial performance. Inventory turnover ratio was confirmed to have a negative connection with economic 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 four major factors which include leverage, liquidity, firm size and inventory turnover ratio affected the financial performance. The variables were able to explain their influence on the financial performance up to 11.5% and the rest is contributed by other factors not considered in this study meaning the model was significant.

5.3 Conclusions

From the study, a weak positive correlation was found to be there between leverage with the financial performance. The correlation coefficient was confirmed to be 0.069 which was an indication of a weak relationship. A negative relationship was confirmed to exist between inventory turnover ratio and the financial performance. The correlation coefficient was confirmed to be -0.152. A weak positive correlation was found to be there amid firm size and the financial performance, correlation coefficient was confirmed to be 0.233 which was an indication of a weak relationship. A negative relationship was confirmed to exist between inventory turnover ratio and the financial performance. This relationship was not significant ($p > 0.05$).

From the findings of this study, it was confirmed that working capital had a positive relationship with the financial performance. This was supported from the research which confirmed that the variables which were analyzed proved the existence of positive connection among working capital with economic performance furthermore they included, firm size, leverage, inventory turnover ratio and liquidity capital adequacy and liquidity. The relationships were confirmed to be significant between firm size, liquidity and financial performance. However, the relationships were confirmed to be not

significant between inventory turnover ratio, leverage and financial performance. This study concludes the same findings with that of Lin (2014) who made conclusions that the management of working capital affected the economic performance of the companies in India.

5.4 Recommendations

Leverage was confirmed to be a major determinant of the profitability and survival of the entities, therefore it is recommended that entities manage debt prudently since it was confirmed to yield better financial results. Poor management of debt exposes firms to risks of bankruptcy.

This research recommends that firms be inclined towards ensuring growth of their firms to greater heights in terms of the assets base and market capitalization. Since larger firms were found to be more profitable than smaller firms. Smaller firms can not enjoy economies of scale due to their low purchasing power.

This study recommends that business entities should adequately ensure they meet their short term obligations as they fall due, this will guarantee trust from the creditors and ensure continued flow of the finished products into the market. Failure to honor the short term obligations by the companies contributes to losses.

5.5 Limitations of the Study

Time constraint, considering the fact that this paper relied on data from the multiple sources which included Capital Markets Authority and the individual companies and the

Nairobi Securities Exchange, more time was needed for the entire exercise of data collection 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

It is highly recommended that a research be done on the informal sector. Informal sector is pivotal in economic growth, therefore the need on their working capital management to guarantee better performance.

A research can be done on Dar salaam Stock Exchange to assess the performance and also different strategies the companies employ to deal with the issues of working capital management when they arise.

A study can be done on non-listed companies to establish how their working capital management will affect their financial performance. This will help in the comparison in performances with other entities.

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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 II: DATA

Company	Year	Ln Assets	Liquidity	Debt Ratio	ROA	Inventory Turnover Ratio
Sasini	2013	10.32	0.25	0.38	0.122	1.52
	2014	9.01	0.2	0.57	0.096	2.85
	2015	9.58	0.476	0.6	0.133	1.26
	2016	9.61	0.909	0.5	0.159	0.55
	2017	8.39	0.192	0.45	0.041	2.34
Kapchorua Tea	2013	10.22	0.179	0.85	0.118	4.75
	2014	10.06	0.135	0.63	0.047	4.67
	2015	9.42	0.13	0.68	-0.009	5.23
	2016	10.91	0.112	0.64	0.0567	5.71
	2017	9.45	0.103	0.64	0.0328	6.21
Car&General	2013	8.71	0.013	0.36	0.0418	7.69
	2014	9.25	0.014	0.83	0.0328	2.29
	2015	9.53	0.018	0.73	0.02	4.56
	2016	11.01	0.021	0.31	0.051	4.76
	2017	20.07	0.029	0.4	0.279	3.79
Stanbic	2013	10.31	0.022	0.47	0.041	4.23
	2014	9.15	0.022	0.31	0.054	2.68
	2015	9.75	0.011	0.65	0.064	1.09
	2016	9.7	0.011	0.54	0.044	8.50
	2017	8.88	0.012	0.47	-0.123	2.17
I&M	2013	10.43	0.018	0.411	0.28	2.45
	2014	9.67	0.019	0.79	0.074	1.58
	2015	9.54	0.01	0.62	0.035	4.64
	2016	11.58	0.015	0.89	0.09	2.33
	2017	9.36	0.015	0.77	-0.119	1.33
E.A Cables	2013	8.74	0.012	0.81	0.0187	6.75
	2014	9.34	0.004	0.54	0.19	1.35
	2015	11.06	0.011	0.41	0.069	7.27
	2016	10.11	0.02	0.41	0.022	1.25
	2017	9.4	0.02	0.38	0.128	1.90
Kenolkobil	2013	10.43	0.018	0.53	0.0355	6.44
	2014	9.58	0.016	0.19	0.078	1.88
	2015	9.75	0.019	0.62	0.162	3.68
	2016	9.8	0.022	0.53	0.0238	5.15
	2017	8.53	0.016	1.14	0.052	3.18
Umeme	2013	10.57	0.018	0.19	0.039	7.56
	2014	9.63	0.017	0.55	0.118	2.35

	2015	9.51	0.012	0.58	0.037	4.85
	2016	11.13	0.02	0.68	0.0263	3.40
	2017	9.49	0.029	0.43	0.067	4.83
Sanlam	2013	9.45	0.029	0.57	0.029	2.66
	2014	9.56	0.034	0.62	0.145	5.24
	2015	11.08	0.04	0.27	-0.033	6.75
	2016	9.72	0.04	0.38	0.1148	3.50
	2017	9.61	0.045	0.78	0.47	1.33
Liberty	2013	10.47	0.059	0.72	0.23	1.22
	2014	9.42	1.25	0.51	0.22	0.41
	2015	9.84	0.038	0.64	-0.069	2.84
	2016	9.83	0.5	0.55	0.22	1.10
	2017	9.84	0.455	0.39	0.134	0.86
Nic	2013	8.76	0.042	0.39	0.233	3.08
	2014	10.26	0.016	0.61	0.122	5.92
	2015	9.74	0.026	0.65	0.096	6.28
	2016	9.58	0.015	0.73	0.133	8.67
	2017	11.25	0.007	0.39	0.159	5.71
Express	2013	9.55	0.009	0.45	0.041	4.72
	2014	9.45	0.009	0.311	0.118	4.56
	2015	10	0.01	0.19	0.047	1.95
	2016	11.11	0.012	0.32	-0.009	6.67
	2017	9.72	0.015	0.47	0.0567	1.33
Sameer	2013	10.56	0.014	0.74	0.0328	2.86
	2014	9.32	0.014	0.46	0.0418	2.86
	2015	9.91	0.015	0.65	0.0328	4.34
	2016	9.89	0.016	0.61	0.02	6.85
	2017	8.6	0.052	0.63	0.051	2.12
Scangroup	2013	10.73	0.047	0.63	0.279	3.43
	2014	11.19	0.032	0.85	0.041	6.56
	2015	9.57	0.029	0.29	0.054	1.86
	2016	11.34	0.029	0.75	0.064	6.87
	2017	9.49	0.014	0.53	0.044	3.16
Longhorn	2013	9.42	0.015	0.31	-0.123	2.67
	2014	9.93	0.02	0.15	0.28	7.50
	2015	9.51	0.02	0.28	0.074	1.40
	2016	11.13	0.02	0.57	0.035	8.50
	2017	10.08	0.02	0.54	0.09	2.74
Deacons	2013	10.72	0.017	0.68	-0.119	1.54
	2014	9.37	0.02	0.36	0.0187	1.87
	2015	9.95	0.021	0.96	0.19	4.50

	2016	9.87	0.019	0.58	0.069	3.53
	2017	8.46	0.019	0.86	0.022	4.26
Arm	2013	10.78	0.02	0.86	0.128	4.43
	2014	10.33	0.02	0.28	0.0355	1.40
	2015	9.62	0.074	0.59	0.078	7.97
	2016	11.44	0.073	0.77	0.162	4.55
	2017	9.45	0.063	0.41	0.0238	6.51
Total	2013	9.34	0.058	0.58	0.052	4.68
	2014	9.58	0.058	0.27	0.039	4.13
	2015	9.44	0.056	0.53	0.118	5.73
	2016	11.2	0.052	0.27	0.037	3.99
	2017	10.13	0.035	0.45	0.0263	6.86
	2013	10.71	0.031	0.45	0.067	4.52
	2014	9.36	0.03	0.24	0.029	3.76
	2015	9.98	0.02	0.67	0.145	3.50
	2016	9.91	0.017	0.71	-0.033	1.76
	2017	8.58	0.009	0.98	0.1148	1.89
Jubilee	2013	10.86	0.014	0.98	0.47	2.78
	2014	9.54	0.033	0.39	0.23	1.84
	2015	9.71	0.014	0.62	0.22	4.29
	2016	11.47	0.012	0.78	-0.069	6.50
	2017	8.77	0.01	0.54	0.22	5.43
Kenya Re	2013	10.32	0.25	0.38	0.122	1.52
	2014	9.01	0.2	0.57	0.096	2.85
	2015	9.58	0.476	0.6	0.133	1.26
	2016	9.61	0.909	0.5	0.159	0.55
	2017	8.39	0.192	0.45	0.041	1.67
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	2014	10.06	0.135	0.63	0.047	3.76
	2015	9.42	0.13	0.68	-0.009	5.23
	2016	10.91	0.112	0.64	0.0567	5.71
	2017	9.45	0.103	0.64	0.0328	6.21
Trans-Century	2013	8.71	0.013	0.36	0.0418	7.69
	2014	9.25	0.014	0.83	0.0328	9.29
	2015	9.53	0.018	0.73	0.02	4.56
	2016	11.01	0.021	0.31	0.051	4.76
	2017	20.07	0.029	0.4	0.279	3.79
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	2014	9.15	0.022	0.31	0.054	4.09
	2015	9.75	0.011	0.65	0.064	3.08
	2016	9.7	0.011	0.54	0.044	2.65

	2017	8.88	0.012	0.47	-0.123	9.17
B.O.C	2013	10.43	0.018	0.411	0.28	2.83
	2014	9.67	0.019	0.79	0.074	2.56
	2015	9.54	0.01	0.62	0.035	2.60
	2016	11.58	0.015	0.89	0.09	9.33
	2017	9.36	0.015	0.77	-0.119	1.75
Carbacid	2013	8.74	0.012	0.81	0.0187	7.75
	2014	9.34	0.004	0.54	0.19	1.35
	2015	11.06	0.011	0.41	0.069	7.27
	2016	10.11	0.02	0.41	0.022	2.50
	2017	9.4	0.02	0.38	0.128	1.90
Unga	2013	10.43	0.018	0.53	0.0355	9.44
	2014	9.58	0.016	0.19	0.078	5.88
	2015	9.75	0.019	0.62	0.162	2.63
	2016	9.8	0.022	0.53	0.0238	4.09
	2017	8.53	0.016	1.14	0.052	1.25
Kenya Orchards	2013	10.57	0.018	0.19	0.039	6.56
	2014	9.63	0.017	0.55	0.118	2.35
	2015	9.51	0.012	0.58	0.037	4.23
	2016	11.13	0.02	0.68	0.0263	2.68
	2017	9.49	0.029	0.43	0.067	4.83
Flame Tree	2013	9.45	0.029	0.57	0.029	9.66
	2014	9.56	0.034	0.62	0.145	8.24
	2015	11.08	0.04	0.27	-0.033	6.75
	2016	9.72	0.04	0.38	0.1148	5.63
	2017	9.61	0.045	0.78	0.47	7.33
Tps	2013	10.47	0.059	0.72	0.23	12.20
	2014	9.42	1.25	0.51	0.22	0.41
	2015	9.84	0.038	0.64	-0.069	6.84
	2016	9.83	0.5	0.55	0.22	1.10
	2017	13.5	0.8	0.56	0.23	0.70