

**WORKING CAPITAL MANAGEMENT APPROACHES AND THE
FINANCIAL PERFORMANCE OF AGRICULTURAL COMPANIES
LISTED AT THE NAIROBI SECURITIES EXCHANGE**

BY

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DECLARATION

Declaration by the student

This research project is my original work and has not been presented for a degree in any other University. No part of this proposal may be reproduced without prior permission of the author and /or the University of Nairobi.

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To my worthy classmates, I say thank you and I wish you all wonderful moments in your careers.

DEDICATION

This research project is dedicated to my beloved husband (Eric) and son (Bryan)

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
AR	Accounts Receivable
BSA	Balance Sheet Approach
CA	Current Assets
CCC	Cash Conversion Cycle
CL	Current Liabilities
CMA	Capital Market Authority
EBIT	Earnings Before Interest and Tax
GWCA	Gross Working Capital Approach
GDP	Gross Domestic Product
IPO	Initial Public Offers
KRA	Kenya Revenue Authority
KSE	Karachi Stock Exchange
NSE	Nairobi Securities Exchange
NWCA	Net Working Capital Approach
OCA	Operating Cycle Approach
PBIT	Profit Before Interest and Tax
ROA	Return On Assets
ROE	Return On Equity
SE	Standard Error
SPSS	Statistical Package for Social Sciences

TA	Total Assets
TCA	Total Current Asset
TCL	Total Current Liabilities
USA	United States of America
WC	Working Capital
WCM	Working Capital Management
WCMA	Working Capital Management Approach

ABSTRACT

Working capital management approach is one of the most important decisions that company managers consider for effective financial management. The relationship between firm's profitability and working capital management approach is frequently emphasized for deciding on the level of investment in working capital. This study examined the relationship between working capital management approach and financial performance of all agricultural firms listed in the Nairobi Securities Exchange (NSE), Kenya. A diagnostic research design was used to determine the association of working capital management approach with company's financial performance. The data was obtained through document analysis of annual consolidated financial reports of years ending December: 2009, 2010, 2011, 2012, and 2013 of all companies as published by the Nairobi Securities Exchange and Capital Markets Authority (CMA). The regression analysis was performed for each company to establish the relationship between the Return on Assets and the working capital management approach. The results indicated that Limuru tea Limited was the most profitable agricultural company (Return on Asset: ROA = 46.48%) while Eagards was the least profitable (ROA = 4%). There was significant difference between the companies profitability estimates (ANOVA $P = 0.0005$, $F = 5.96$, $df = 6$) probably because each firm has different proportion of total assets, which technically influences how much profit each company makes. Statistically, each company employed a different working capital management approach (ANOVA: $P = 0.002$, $F = 4.55$, $df = 6$). However, the working capital management approach was less than 50 % in all companies suggesting that the companies used different levels of

conservative working capital management approaches. However, that the management approach for Kapchorua tea; Reavipingo and Williamson companies adopted less conservative approaches. The strong negative regression association ($r^2 = 0.73$) between ROA and working capital management approach adopted by Sasini limited indicated significant effect of the working capital management approach on the company's profitability ($F = 21.64$, $P = 0.002$, $df = 6$). This could be attributed to the large company's total asset estimated at Ksh. 8.8 billion, of which a larger proportion could be idle. In conclusion, all the agricultural companies currently listed in the NSE exercise different levels of conservative working capital management approach. The study recommends that similar studies should be conducted for non listed agricultural companies in Kenya to derive a broader conclusion on the effects of working capital management approach on agricultural companies in Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

1.1.1 Working Capital

Working capital (WC) is regarded as that proportion of company's total capital which is employed in short term operations (Remamoorthy, 1978). It represents the firm's investments in cash, marketable securities, accounts receivables and inventories less the current liabilities used to finance the current assets. Agrawal (1983) refers to this measure as net working capital. According to Brigham and Houston (2007) Working capital is a financial metric which represents operating liquidity available to a business, organization, or other entity, including governmental entity. Working capital is considered as the life-blood of any business and its performance has significant impact on the overall performance of business enterprises (Shashi and Sharma, 2005).

Gupta and Sharma (2005) grouped the concepts of working capital in to two: the Balance Sheet Approach (BSA) and the Operating Cycle Approach (OCA). The BSA entails the Gross Working Capital Approach (GWCA), which is the capital invested in total current assets of the enterprise and Net Working Capital Approach (NWCA), which is the difference between Current Assets (CA) and Current Liabilities (CL). The Operating cycle Approach (OCA) is the time duration required to convert sales, after the conversion of resources into inventories and that into Current Assets (Moyer *et al.*, 2005). Gupta and Sharma (2005) further classified the working capital as shown in figure 1.1.

1.1.2 Working Capital Management

Working capital management is an important element in analyzing firm's financial performance. Working capital management is a managerial accounting strategy, which focuses on maintaining efficient levels of components of working capital such as current assets and current liabilities. Efficient management of working capital ensures a company has sufficient cash flow to meet its short-term debt obligations and operating expenses. Therefore, adopting effective working capital management system enables companies to improve their earnings (Waithaka, 2012).

According to Smith (1980) working capital management is important because of its direct effect on firm's profitability, risks, and values. Management of working capital aims at maintaining an optimal balance between each of the working capital components i.e. cash, receivables, inventory and payables (Deloof, 2003). In practice, working capital management has become one of the most important issues in companies with many financial executives struggling to identify the basic working capital drivers and the appropriate level of working capital to minimize risk and effectively prepare for uncertainty and improve the overall performance of their respective businesses (Lamberson, 1995).

According to Hampton (1989), working capital management approach is a function of two decisions: the appropriate level of investment in current assets and the chosen methods of financing the investment. The trade-off between profitability and risk depends on the level of company's current assets and working capital (Afzar and Nazir, 2009).

Thus, if there were little risks, an aggressive working capital management approach would be used and the company maintains a minimum level of cash, securities, debtors and stocks. However, if there is little stability, a more conservative policy will be called for requiring high cash balances and high stock reserves (Afzar and Nazir, 2009).

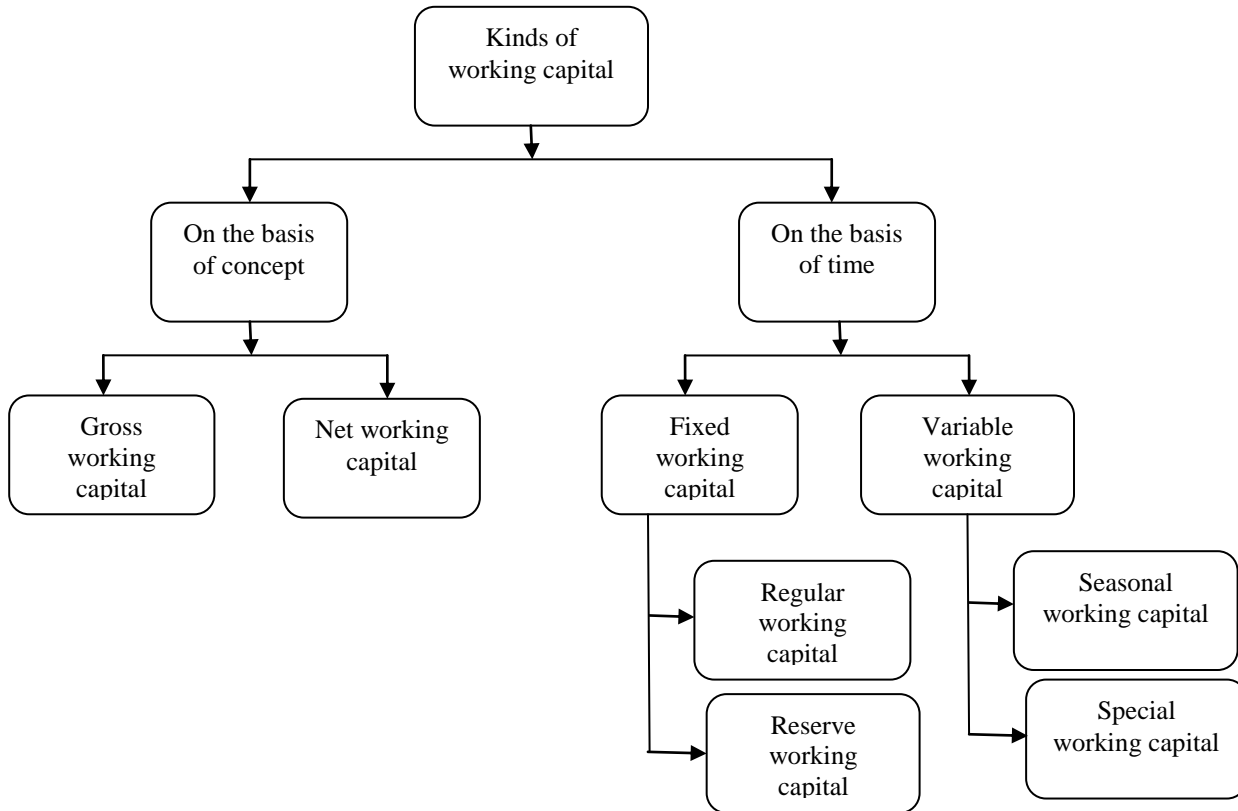


Figure 1.1: Classification of Working Capital. Source: Gupta and Sharma (2005)

The studies of working capital management in companies are important because current assets of firms account for over half of their total assets (Nzioki *et al.*, 2013). For distribution and agricultural companies, they account for even more. Excessive levels of current assets may result in sub-standard return on investment (Nzioki *et al.*, 2013). However, firms with too few current assets may incur shortages and difficulties in maintaining smooth operations (Afza and Nazir, 2009). Efficient working capital

management involves excessive planning and control. Therefore, a balance between current assets and current liabilities must be created in order to eliminate the risk of inability to meet short term obligations (Eljelly, 2004). Many surveys have indicated that managers spend considerable time on day-to-day problems involving working capital decisions. One reason for this is that current assets are short-lived investments that are continually being converted into other asset types (Rao, 1989).

In recent empirical finance literatures, in-depth studies have been conducted to determine correlation between working capital management and firms' profitability profiles (Deloof, 2003). The studies concur that firms prefer higher cash holding levels with fewer inventories and accounts receivables (Bates *et al.*, 2006). According to Ferreira and Vilela (2004), corporations hold about 15% of their total assets in cash or cash equivalents. Some of the theories underpinning this study are Keynesian liquidity preference theory, agency cost of free cash flow theory and the risk- return trade off model. These theories have been discussed in the next chapter.

1.1.3 Working Capital Management Approaches

According to Afza (2008), there are three working capital management approaches namely: aggressive working capital approach, conservative working capital approach and matching or hedging working approach. Pandey (2010) considered working capital management approaches as ways in which firms finance their current assets. A firm may adopt an aggressive working capital approach, a conservative working capital approach or a matching/hedging approach depending on the respective objectives and circumstances the individual firm faces (Afzar and Nazir, 2009).

A firm is said to be using an aggressive working capital management approach when it finances all its temporary assets, permanent current assets and some fixed assets with short term debt (Afza and Nazir, 2009). In this case long term debt financing is used for the remaining portion of fixed assets. An aggressive working capital management approach may be used for the financing decisions of the firm with high level of current liabilities as percentage of total liabilities. Excessive levels of current assets may have a negative effect on the firm's profitability whereas a low level of current assets may lead to lower level of liquidity and stock-outs resulting in difficulties in maintaining smooth operations (Weston, 1975; Van Horne and Wachowicz, 2004). There is low cost, high risk and high profit in this approach.

When a firm uses a conservative working capital management approach it finances all the fixed assets, permanent assets and part of temporary assets with long term debt/equity. Short term sources should be used only in case of emergency. However, there is high cost, low risk and low profit in this approach (Weston, 1975).

The matching or hedging working capital management approach ensures matching the maturities of debt with the maturity of financial needs. It means the sources of funds should match with the nature of assets to be financed. The hedging approach suggests that the permanent working capital requirement should be financed through long term funds, while temporary working capital should be financed through the short term funds. There is low cost, high risk and high profit in this approach (Weston, 1975). The working capital management approach adopted by a firm can be determined by use of a ratio of total current liabilities over total assets, where a higher ratio of more than 50 % means an aggressive policy (Afzar, 2008).

1.2 Financial Performance

The subject of financial performance has received considerable attention from scholars in the various sectors of business and strategic management. Indeed, the financial performance is the primary concern of business practitioners because it has implications to organization's sustainability. Financial performance of a firm is a subjective measure of how well a firm can use assets from its primary mode of business to generate revenue. High financial performance suggests effective and efficient management in making use of company's resources (Naser and Mokhtar, 2004). The various measures of financial performance such as return on sales reveals how much a company earns in relation to its sales. The return on assets determines the firm's ability to make use of its assets while return on equity reveals what return investors take for their investments (Tangen, 2003). Liquidity is an important measure of financial position of a company. It estimates the ability of the firm to meet financial obligations as they come. Liquidity can be analyzed both structurally and operationally. Solvency, which measures the amount of borrowed capital used by the business relative the amount of owner's equity capital invested in the business also provide an indication of the firms' ability to withstand risks (Harrington and Wilson, 1989). Profitability analysis, which focuses on the relationship between revenues and expenses, measures the extent to which a business generates a profit from the factors of production. Four useful measures of profitability are the rate of return on assets (ROA), the rate of return on equity (ROE), operating profit margin and net income (Hansen and Mowen, 2005). For the purpose of this study, one financial indicator return on assets (ROA) was analyzed as a measure of firm's financial performance. ROA is

calculated as earnings before interest and tax divided by the total assets ($ROA = EBIT/TA$).

1.3 Relationship between Working Capital Management Approaches and Financial Performance

Based on the trade off model, the correlation of liquidity and profitability are said to be inversely related to each other. This means that company managers must decide about the levels of current assets to be maintained at each time. Smith (1980) suggests that the management of working capital is important because of its effects on a firm's profitability and risk and consequently the shareholder's wealth.

Working capital management ensures sufficient cash flow to meet short-term debts. Previous studies on working capital management and firms' performances have reported linear relationship between working capital approaches and firms' profitability (Deloof, 2003). The findings of these studies indicate that firms' working capital management approaches have significant relation to net income. Empirical evidence has indicated mixed results on the risk/return tradeoff among working capital approaches. Afza and Nazir (2009) investigated the traditional relationship between working capital management approaches and a firm's profitability and their result contradicted those of Deloof (2003), and Eljelly (2004) as they produced a negative relationship between aggressive working capital policies and profitability.

1.4 Agricultural Companies Listed at the Nairobi Securities Exchange

Agriculture growth and development is critical to Kenya's economic and social development. Indeed, the sector contributes about 26 % of Gross Domestic Product (GDP) and a further 27 % through linkages with manufacturing, distribution and services related sectors, which forms the basis of Kenya's economy (Nyangito and Okello, 1998). Kenya's agricultural sector directly influences overall economic performance through its contribution to GDP. Indeed, periods of high economic growth rates in the country have always been associated with increased agricultural growth (Waithaka, 2012). One of the most dominant agricultural sectors in Kenya is the tea and coffee sector. Currently, there are a number of agricultural companies in Kenya in different product lines. However, there are only seven agricultural companies listed in the Nairobi Securities Exchange. These include: Eaagads limited, Kapchorua Tea Company limited, Kakuzi Limited, Limuru Tea Company Limited, Rea Vipingo plantations Limited, Sasini Tea and Coffee Limited and Williamson Tea Kenya Limited (Nurmet, 2011).

The securities exchange can enhance the development of agricultural sector through cheap and long-term capital for business expansion and diversification into other areas. The common practice today is that the companies rely on commercial banks' credit for business expansion or to delay their investment plans until they generate sufficient funds internally (Messah, 2011). Both methods are quite expensive. Besides, the financial institutions have been reluctant to finance agricultural sector (Wahome, 2007; Nurmet, 2011). An agricultural company waiting to finance investment through internally generated savings may lose business opportunities or fail to undertake the envisaged expansion due to cost escalation. In short, provided the companies operating in various

sections including agricultural business are efficient and well managed, they can benefit immensely by using the stock exchange to raise long-term investible capital. Even though other securities, such as bonds, debentures and loan stocks can be issued instead of shares, the most conservative approach for agricultural companies is the opportunity to enter the market and raise investible capital. Effective working capital management is vital in ensuring sustainable growth and development of the agricultural sector in Kenya which will in turn boost entity's financial performance.

1.5 Research Problem

The optimal level of working capital is determined to a large extent by the approaches adopted for the management of current assets and liabilities. Indeed, working capital starvation has generally been credited as a major cause of business failure in many developed and developing countries (Rafuse, 1996). The strategic importance of working capital management has ignited many researchers to focus on evaluating the working capital management and profitability relationships in business enterprises all over the world (Uyar, 2009). Regrettably, most studies have largely focus on developed markets (Peel and Wilson, 1996; Shin and Soenon, 1998; Deloof, 2003). Similar investigations could provide useful insights on the impacts working capital management approaches in emerging capital markets like Kenya.

Despite agriculture being the main sector through which the country can generate wealth and create employment as well as achieve food security and reduce poverty (Were *et al.*, 2002), information about the performance of the agricultural companies in the Nairobi securities exchange is scanty (Nurmet, 2011). The impact of working capital management

approaches is highly important; however, very few empirical studies have been carried out to examine the impact of working capital management approaches on financial performance and risk of Kenyan agricultural firms listed at the NSE (Nurmet, 2011; Waithaka, 2012). Previous studies in Kenya focused their analysis on manufacturing firms at the expense of agricultural ones (Makori and Jagongo, 2013; Nzioki *et al.*, 2013; Apuoyo, 2010; Wainaina, 2010; Mutungi, 2010; Mathai, 2010). Other studies done by Mathuva (2010) and Oloo and Mwangi (2010) generalized the effects of working capital management on companies without mentioning specific sectors. Nevertheless, Nyakundi (2003) did a survey of working capital management approaches among public companies in Kenya and found no relationship between working capital management and profitability. However, studies of Waweru (2011) on the relationship between working capital management and the value of the companies listed at the NSE identified relationship between efficient working capital management and the value of firms quoted at the NSE. Kithii (2008) found a negative relationship between cash conversion cycle and profitability when she studied the relationship between working capital management and profitability of companies listed in the NSE. Mutungi (2010) identified the existence of aggressive working capital approach in the Kenyan oil sector when he studied the relationship between working capital management and financial performance of oil marketing firms in Kenya.

Studies of Messah (2011) revealed that Kenyan agricultural companies still suffer from basic management challenges such as lack of application fees, unfavorable legal and regulatory framework on listing, lack of confidence in the NSE and inadequate public awareness thus prevents them from meeting the stringent conditions set by the NSE.

Based on these findings, this study proposes to investigate whether working capital management approaches influence the low listing status and poor performance of the agricultural companies in the NSE as identified by Messah (2011). Since Kenya's exports are dominated by agricultural products (Were *et al.*, 2002), it is expected that agricultural based companies should lead others in terms of listing and performance at the Nairobi Securities Exchange. The study covers only the listed agricultural firms at the NSE in Kenya, for which an attempt is made to provide an empirical support to the hypothesized relationship between working capital management approaches and financial performance.

1.6 Research Objective

The general objective of this study is to determine the relationship between the working capital management approaches and the financial performance of agricultural firms listed in the NSE over a period of five years from 2009 to 2013.

1.6.1 The specific objectives

- i. To establish the working capital management approaches used by the agricultural firms listed at the NSE.
- ii. To determine the effect of working capital management approach on performance of agricultural firms listed at the NSE.

1.6.2 Value of the Study

Agricultural firms invest heavily in the various working capital components and it would be interesting to study the impacts of working capital management approaches on their performance. The findings of this study are expected to contribute to the existing

literature of the working capital management, which can be used by the managers to maximize the firm's financial performance. This study will contribute to better understanding of these policies and their impact especially in the Kenyan agricultural sector.

This study will also help scholars to improve on literature on working capital management policies in Kenya and to provide further guidance in filling in the gaps for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Many researchers have investigated the impact of working capital management on profitability in various markets. The studies reviewed have used various variables to analyze the relationship with different methodology such as linear regression and panel data. This section presents the chronology of major studies related to this study in order to identify the research gap. A theoretical review on working capital and financial performance is presented followed by an empirical review of the two variables. Lastly a summary of the literature review is presented where research gap can be identified.

2.1.1 Working Capital

The subject of working capital is so dynamic and has been discussed by many scholars. Pandey (2010) defined working capital as that part of the firm's capital which is required for financing short-term business requirements as it can technically be a substitute for cash. Weston *et al.* (1975) described working capital as that portion of the firm's investment in short term assets including cash, short term securities, accounts receivable and inventories. The major components of working capital are accounts receivable, inventories, cash and cash equivalents and accounts payable.

Sources of working capital are fixed (shares, debentures, public deposits, ploughing back of profits and loans from financial institutions) or variable (commercial and indigenous banks) (Shashi and Sharma, 2005). Gupta and Sharma (2005) explained four principles of

working capital; principle of risk variation refers to an ability of a firm to maintain sufficient current assets to pay for its obligations, principle of equity position is the amount of working capital invested in each component and should be adequately justified by a firm's equity position. The principle of cost of capital emphasizes the different sources of finance and each source has a different cost of capital. Finally the principle of maturity payment means that a firm should make every attempt to relate maturities of payments to its flow of internally created funds

Maintenance of adequate working capital is an essential condition for efficient financial management because it offers huge cash opportunities that could be released with sustainability within a relative short period of time. Indeed, the four main problem areas of working capital management are inventory, receivables, cash and working finance. Working capital can be financed from internal as well as external sources (Fereira and Vilela, 2004). Companies have increasingly been relying on short-term funds particularly short-term bank credit and trade credit (Gupta and Sharma, 2003). Working capital ratios are useful tools in appraising the financial strength and immediate solvency of a firm.

2.1.2 Working Capital Management and Approaches

Management of working capital refers to management of current assets and current liabilities (Raheman and Nasr, 2007). Working capital management ensures sufficient cash flow to meet short-term debts. The concepts of working capital management are gross working capital, net working capital and net operating capital. Working capital management is of great importance to the financial health of the firm because current assets represent a large portion of total assets and also the largest portion of most

financial managers' time is devoted to the day-to-day internal operations of the firm which fall under working capital. Working capital management therefore involves determining the optimal financing strategies or policies for financing the working capital needs (Afza and Nazir, 2007).

In practice, working capital management approach (WCMA) has become one of the most important issues in the organizations where company executives identify the basic working capital drivers and an appropriate level of working capital (Lamberson, 1995). Indeed, companies can minimize risk and improve the overall performance by understanding the role and drivers of working capital management. However, an appropriate approach is desired (Hall, 2002). Many studies have analyzed the financial ratios as a part of working capital management; however, few of them have discussed the working capital approaches in specific (Afzar and Nazir, 2009). Weinraub and Visscher (1998) discussed the issue of aggressive and conservative working capital management approaches by using quarterly data for the period 1984-93 of the US firms. Their study considered 10 diverse industry groups to examine the relationship between their aggressive/conservative working capital approaches. Their study concluded that the industries had distinctive and significantly different working capital management approaches. The study also showed a high and significant negative correlation between industry asset and liability policies and found that when relatively aggressive working capital asset policies are followed, they are balanced by relatively conservative working capital financial policies. In literature, there is a long debate on the risk/return trade-off among different working capital Approaches (Moyer *et al.*, 2005). More aggressive working capital policies are associated with higher return and risk, while conservative

working capital policies are associated with lower risk and return (Weinraub and Visscher, 1998). Afza and Nazir (2007) investigated the relationship between the aggressive and conservative working capital policies for 17 industrial groups and a large sample of 263 public limited companies listed on Karachi Stock Exchange (KSE) using cross-sectional data for the period 1998-2003. The study found significant differences among their working capital investment and financing policies across different industries. Moreover, rank order correlation confirmed that these significant differences were remarkably stable over the six-year study period. Finally, ordinary least regression analysis found a negative relationship between the profitability measures of firms and the degree of aggressiveness of working capital investment and financing policies.

2.2 Theories Underpinning the Study

Several finance and economics theories can be used to explain the relationship between working capital management approaches and the financial performance of firms. This study has adopted four theories namely: agency cost of free cash flow theory, the trade-off model, the Keynesian liquidity preference theory and the aggressive theory.

2.2.1 Agency Cost of Free Cash Flow Theory

Agency cost of free cash flow theory brings out the fact that organizations suffer agency costs as a result of free cash flow. This theory was put forth by Michael Jensen in 1986. It argues that managers are always tempted to pile up cash under their controls and make investment decisions which might not be in the best interest of shareholders. Corporate managers are the agents of shareholders, a relationship fraught weighed down by conflicting interests. Free cash flow is cash in excess of that required to fund all projects

that have positive net present values when discounted at relevant cost of capital (Jensen, 1986). Efficient working capital management is essential in order to avoid situations whereby managers mismanage the resources of the organization for their own interests. This theory is relevant to this study as it explains why the shareholders of a firm may opt to adopt conservative approach or aggressive working capital management approach bearing in mind the agency costs that they are likely to face.

2.2.2 Trade-Off Model

Trade-off model demonstrates that firms decide their optimal level of cash holding by comparing the marginal cost and benefits of holding cash. Large investment in current assets under certainty would mean low rate of return on assets (ROA) of the firm, as excess investments in current assets will not earn enough return. A smaller investment in current assets, on the other hand, would mean interrupted production and sales, because of frequent stock-outs and inability to pay to its creditors in time due to restrictive policy. Various studies attempted to examine the relationship between working capital management and financial performance which embodied liquidity as a component and profitability (Deloof, 2003; Raheman and Nasr, 2007). The ultimate objective of any firm is to maximize profit. At the same time, preserving liquidity of the firm is an important objective too. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm (Shin and Soenen, 1998).

Therefore, there must be a trade-off between these two objectives of firms. One objective should not be fulfilled at the cost of the other since both are important. If we do not care about profit, we cannot survive for a longer period. On the other hand, if we do not care

about liquidity, we may face the problem of insolvency or bankruptcy. The firm must decide about the levels of current assets to be carried for which a firm's technology and production policy, sales and demand condition, operating efficiency is taken into consideration in the policy decision. It may follow a conservative risk-return trade-off. The rank correlation of liquidity and profitability are said to be inversely related to each other. It implies that as the liquidity increases and profitability decreases (Pandey, 2010). More aggressive working capital approaches are associated with higher return and higher risk while conservative working capital approaches are concerned with lower risk and lower return (Carpenter and Johnson, 1983).

2.2.3 Keynesian Liquidity Preference Theory

Another theory underpinning the study of working capital management approaches is Keynesian liquidity preference theory by economist John Keynes in 1936. The theory argues that when all other things are kept constant, investors prefer liquid investments to illiquid ones and will always demand a premium for investments that have longer maturity periods. According to this theory people hold cash or inventory for transaction, speculative, precaution, and compensation motives. The need for working capital to run the day-to-day business activities cannot be ignored. Entities have to invest enough of available funds in current assets for the success of its operations (Pandey, 2010).

2.2.4 Aggressive Theory

This theory is applied where the firm plans to take high risk and where short term funds are used to a very high degree to finance current and fixed assets. This approach is characterized by low interest rates. However, it's important to note that that the risk

associated with short term debt is higher than long term debt. This applies mostly to companies/ firms operating in a stable economy and is quite certain about future cash flows. A company with an aggressive working capital policy offers short credit periods to customers, holds minimal inventory and has a small amount of cash in hand. This policy increases the risk of defaulting due to the fact that a company might face lack of resources to meet short term liabilities but also give a high return as it's associated with high risk

2.3 Review of Empirical Studies

Shin and Soenen (1998) analyzed the relation between working capital management and profitability for a sample of firms listed on the US stock exchange during the period 1974-1994. Their results showed positive correlation between reducing the cash conversion cycle and firms' profitability. In USA, Danielson and Scott (2000) reported that small and medium-sized firms use vendor financing when they have run out of debt. Hence efficient working capital management is particularly important even for smaller companies (Peel and Wilson, 1996). As Demircug-Kunt and Maksimovic (2002) suggest, firms operating in countries with more developed banking systems grant more trade credit to their customers, and at the same time they receive more finance from their own suppliers.

Deloof (2003) analyzed a sample of large Belgian firms during the period 1992-1996 and found that firms can improve their profitability by reducing the number of days accounts receivable are outstanding and reducing inventories. Mathuva (2009) who investigated the relationship between working capital management efficiency and EBIT in 30 firms listed at the Nairobi Securities exchange found similar results as those of a study

conducted in Finland and Sweden by Rehn (2012) that established a strong negative relationship between firm's net trade cycle and profitability after studying 58,985 firms. In Ethiopia, Mekonnen (2011) concluded that managers can create value by reducing their firm's number of days accounts receivable and inventories. Also by shortening the cash conversion cycle improves the firm's profitability. In Bangladesh textile companies, Rahman (2011) found that all the components of working capital play an important role in determining the profitability of a firm. More recently, Rehn (2012) concluded that profitability can be increased by effectively managing working capital in Finland and Swedish companies. Velnampy *et al.* (2013) conducted a study in Srilanka to find out the relationship between aggressive working capital policies and profitability of manufacturing firms listed under Colombo stock exchange and they found that the aggressive working capital investment and financing policies have no impact on profitability measures of ROA and ROE. Makori and Jagongo (2013) also established a negative relationship between profitability and number of day's accounts receivable (AR) and cash conversion cycle (CCC), but a positive relationship between profitability and number of days of inventory and number of day's payable on a study conducted on the impact of working capital management and firm profitability of manufacturing and construction firms listed at the NSE, Kenya.

2.4 Summary of Literature Review

In order to understand the importance of working capital one has to understand the working capital cycle which is described as the core for working capital management. Mayo (2007) demonstrated that working capital cycle includes all the major dimensions of business operations which include managing inventory, selling the inventory,

collecting accounts receivable, investing temporary excess cash, raising short term funds and meeting current obligations as they fall due. It is quite clear that a bad management of a single account in this cycle might cause a big trouble for the non living entity which might leads to its death. Therefore, the management of working capital entails a balance in the components of working capital for the smooth running of business. However, this needs further study to determine whether agricultural companies are affected the same way.

In conclusion, scientific investigations of relationships of working capital management approaches and the financial performance of agricultural firms have not received equal attention as compared to companies in other sectors. The situation is worse for developing countries like Kenya, where agricultural firms struggle with challenges such as obtaining funds from financial institutions, which are equally not well established compared to developed countries, poor weather conditions as well as rising prices of agricultural inputs. This indeed is the scientific gap that this study intended to fill by providing the much needed information as to whether the approach used by agricultural firms to manage their working capital also contributes to the level of their financial performances.

2.5 Conceptual Framework

Conceptualization model shows the relationship between working capital management approaches and the financial performance of agricultural firms listed at the Nairobi Securities Exchange. Based on the literature the following conceptual framework has been adopted (Figure 2.1).

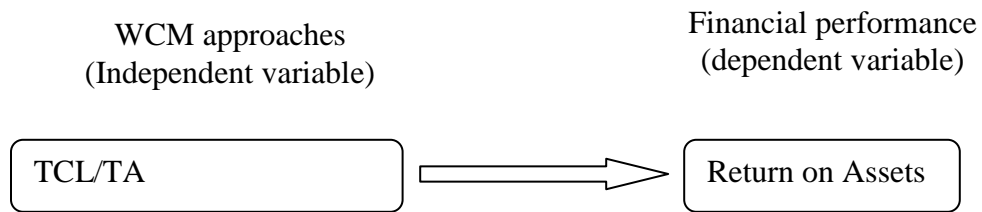


Figure 2.1: Conceptualization framework

In this study the independent variable is the working capital approach applied by the agricultural firms which was determined by calculating the average TCL/TA of each firm for the five years under study. The dependent variable in this case is the financial performance represented by return on assets.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology of the study. It describes the design, target population, data collection procedures, analysis and ethical considerations that were applied in the study.

3.2 Research Design

This study used the diagnostic research design as explained by Kothari (2004) and Nzioki *et al.* (2013). This research design is appropriate because it determines the association of working capital management approach with company's financial performance. This design enables easy identification and exposes the relationship between the independent and the dependent variables.

The individuality or uniqueness of each agricultural firm was considered as each firm was expected to employ different working capital management approach. This was determined by analyzing the individual's company's regression coefficient.

3.3 Study Population

This study targeted all the agricultural companies listed at the NSE. Listed companies are appropriate for the study since they are public entities operating under strict corporate governance regulations, making their financial and accounting disclosures largely

reliable. The results of the analysis were expected to be closer to the reality because all the targeted companies were involved.

Currently, there are only seven agricultural companies listed in the Nairobi Securities Exchange. These include: Eaagads limited, Kapchorua Tea Company Limited, Kakuzi Limited, Limuru Tea Company limited, Rea Vipingo plantations Limited, Sasini Tea and Coffee Limited and Williamson Tea Kenya Limited.

3.4 Data Collection

Data was obtained from only secondary sources. The data was obtained through document analysis of consolidated financial reports of years ending December: 2009, 2010, 2011, 2012, and 2013 of all the seven companies. The data was collected from the annual reports of the said companies which are published by the Nairobi Securities Exchange or annual data submitted by the said companies to the Capital Markets Authority (CMA). The use of the secondary data enabled me to collect reliable and relevant information from the target population and save on time and cost.

In this study, the impact of working capital approaches on the profitability of agricultural firms was analyzed through frequently used profitability measures i.e. return on assets (ROA) by running cross-sectional regressions (Afza, 2008). The performance of dependent variable (ROA) and independent variable (TCL/TA) was averaged for the period of five years i.e. 2009-2013. The working capital management approach was measured by using a ratio of TCL/TA of firms. The following regression model was run to estimate the relationship between working capital management approach and the financial performance of agricultural firms:

$$\text{ROA } i = \alpha + \beta_2 (\text{TCL/TA } i) + \varepsilon$$

Where:

ROA i = Average Return on Assets of Firm i for the period of 2009-2013

TCL/TA i = Average Total Current Liabilities to Total Assets Ratio of Firm i for the period of 2009-2013

α = intercept

ε = error term of the model

The selected variables were computed as shown in table 1.

Table 1.1: Measurement of selected variables

Variables	Method of Computation
WCMA	(TCL/TA) /number of years under study
ROA	(EBIT/ Total assets)/ number of years under study
EBIT	Profit before tax + interest expenses
TA	Current assets + non-current assets

3.5 Data Analysis

The data collected was analyzed by employing descriptive statistics, regression and correlation analysis to establish the relationship between the independent variables of working capital management approach: ratio (TCL/TA) and the dependent variable, financial performance (ROA). According to Kothari (2004), regression analysis is

concerned with the study of how one or more variables affect changes in another variable. Data analyzed is presented by use of tables and graphs. This was achieved through the use of computer program, statistical package for Social Sciences (SPSS).

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter interprets and discusses the research findings, which have been grouped into descriptive, regression analysis and ANOVA. The statistical package for social sciences SPSS was used for all the analysis. The findings are presented using tables and graphs. The data was collected from the seven agricultural firms listed at the NSE for the period between 2009 and 2013. The companies include: Kakuzi Limited, Rea Vipingo Limited, Eeagads Limited, Limuru Tea Company Limited, Williamson Tea Limited, Sasini Limited and Kapchorua Tea Company Limited. This market was preferred because of the availability and the reliability of financial statements in their respective websites. In addition, the companies are subject to the mandatory audit by internationally recognized audit firms.

The regressions also included the ratio of current liabilities to the total assets to measure the degree of aggressiveness/conservativeness of the working capital financing policy with a high ratio ($> 50\%$) being relatively more aggressive while a low ratio ($< 50\%$) suggested conservative policies. All the data was first subjected to normality test. The histograms of normality tests (Figure 4.1) showed that the data were normally distributed.

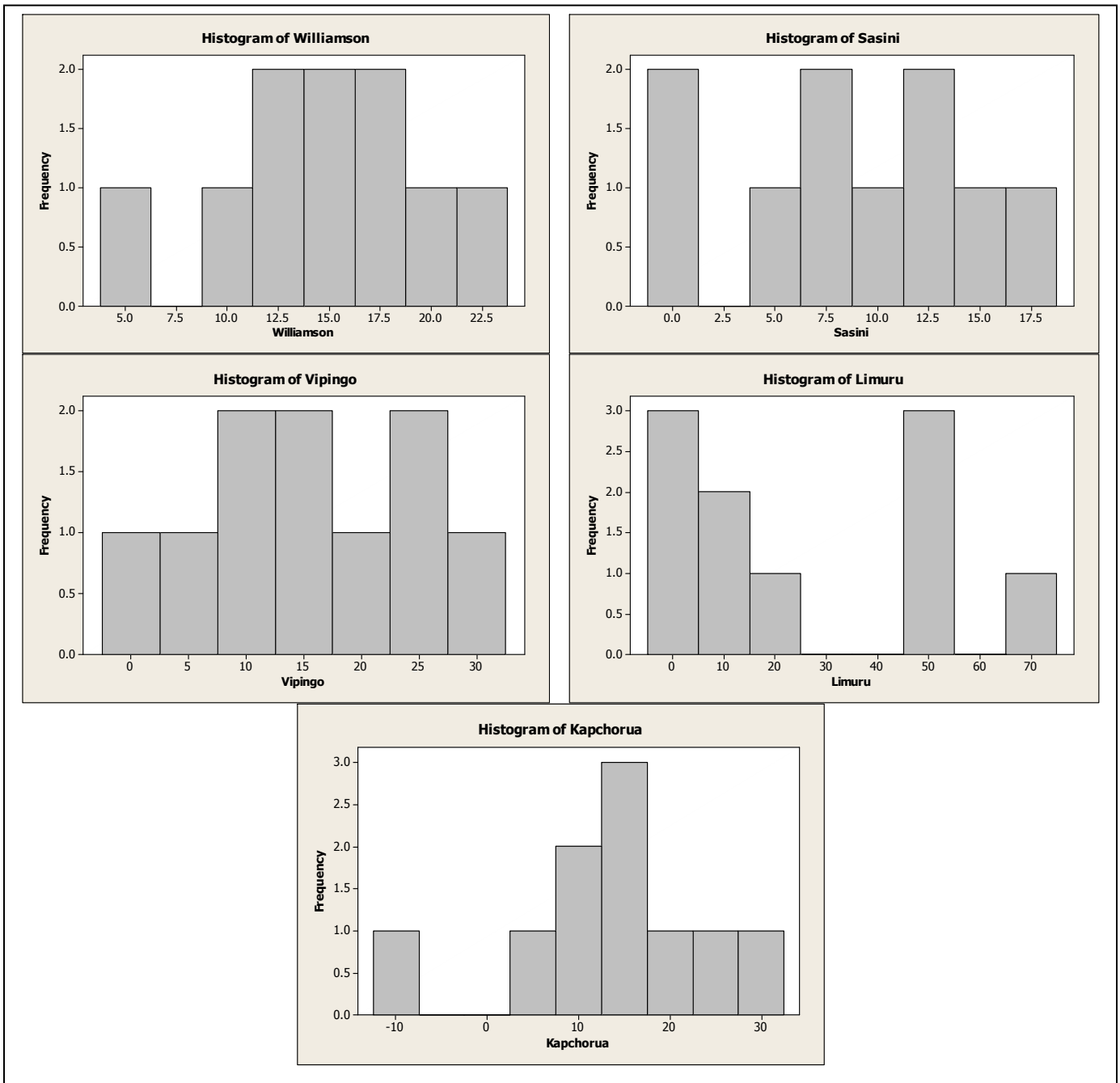


Figure 4.1: SPSS outputs for the normality tests

4.3 Descriptive Analysis

Descriptive analysis presents the mean, standard deviation, minimum and maximum values of the ROA and TCL/TA in the study. Table 1.2 and table 1.3 gives the descriptive statistics for the main variables used in this study. The descriptive analysis of all the variables in the study is sourced using SPSS software for the 7 listed agricultural companies in Kenya, 2009-2013.

Table 1.2: Descriptive statistics for TCL/TA (%) for Seven agricultural companies listed at NSE for a Five year period (2009 – 2013): SE = Standard Error

	Williamson	Sasini	ReaVipingo	Limuru	Kapchorua	Kakuzi	Eeagads
Mean	12.98838	8.810826	15.75676	7.044095	19.59777	8.535691	4.002009
SE	1.43795	1.913225	3.087419	3.410598	2.681779	1.367736	1.822743
Minimum	9.205313	4.570507	7.888062	1.775312	11.97333	4.319329	0.790085
Maximum	17.79971	14.30297	25.59138	20.21134	27.59413	11.92069	7.101235
Sum	64.94191	44.05413	78.78379	35.22047	97.98887	42.67846	12.00603

Table 1.3: Descriptive statistics for ROA (%) for Seven agricultural companies listed in NSE for a Five year period (2009 – 2013): SE = Standard Error

	Williamson	Sasini	Vipingo	Limuru	Kapchorua	Kakuzi	Eeagads
Mean	15.87834	7.769519	15.68137	46.48522	6.87169	15.5122	6.080688
S.E	3.28298	3.259864	5.295092	8.654521	4.670144	2.9466	13.06187
Range	18.79591	17.39721	29.55981	52.63462	26.54653	15.95537	45.24588
Minimum	4.167766	0.019388	1.181343	14.88189	-10.1651	6.899016	-16.6576
Maximum	22.96368	17.41659	30.74115	67.5165	16.38145	22.85438	28.58825

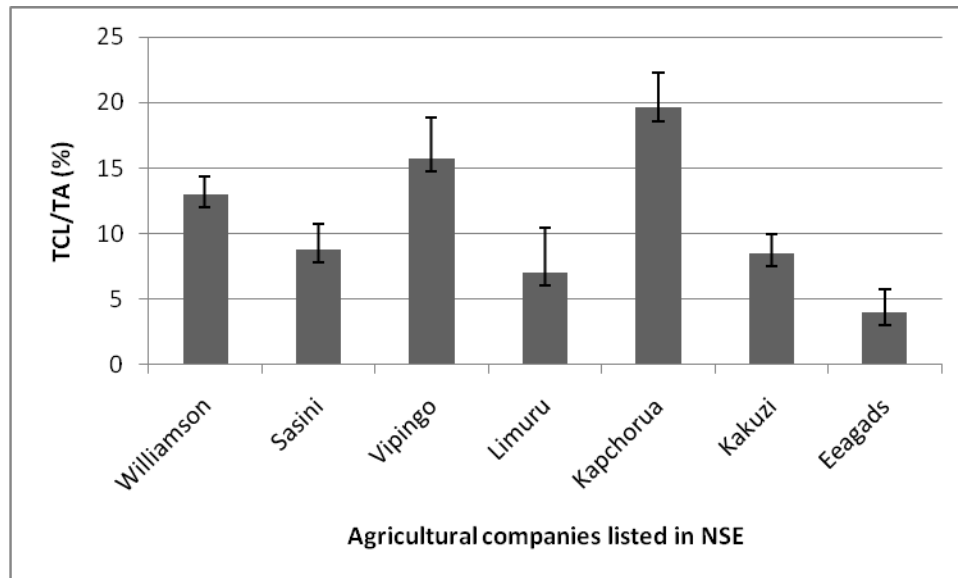


Figure 4.2 Mean and standard Error of Capital management approaches for the seven agricultural companies listed in the NSE

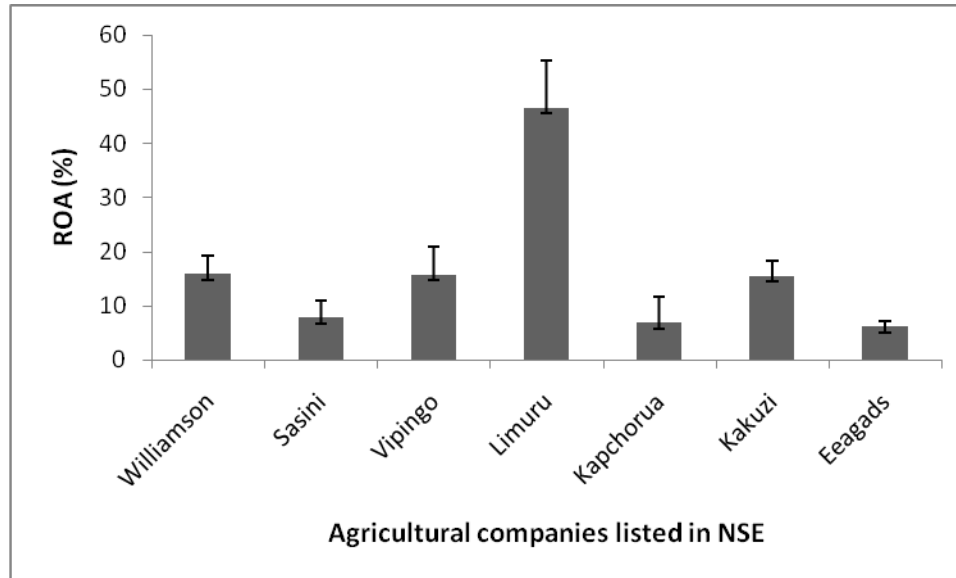


Figure 4.3 Mean and standard Error of working capital management approaches for the seven agricultural companies listed at the NSE

4.4 The Company's Working Capital Management Approaches and financial performance.

Based on the ROA results, Limuru tea was the most profitable agricultural company (ROA = 46.48%) while Eeagads was the least profitable (ROA = 4%). There was significant difference between the companies profitability estimates for the five years (ANOVA $P = 0.0005$, $F = 5.96$, $df = 6$). This is because the companies have different proportions of total assets, which technically influences how much profit each company makes. Large investment in current assets under certainty would mean low rate of return on assets (ROA) of the firm, as excess investments in current assets will not earn enough return (Deloof, 2003; Raheman and Nasr, 2007). Besides the working capital

management approach exercised by each company, other factors such as company size may as well influence the profitability estimates.

Statistically, each company employed a different working capital management approach (ANOVA $P = 0.002$, $F = 4.55$, $df = 6$). However, the TCL/TA (%) was less than 50 % in all companies suggesting that the companies used different levels of conservative working capital management approaches (table 1.2). This could be due to the fact that most agricultural companies use more of long term funds to finance their working capital needs. Indeed, these findings reflect those of Oloo et al. (2014), who observed that conservative financing plans rely heavily on long term financing because firms have less risk of facing the problem of fund shortages. The conservative working capital management approach determines the optimal financing strategies for financing working capital needs (Felbeck and Krueger. 2005). Weinraub and Visscher (1998) also concluded that industries, including those that deal with similar goods can exercise different levels of the same working capital management approach or have significantly different working capital management approaches altogether. Companies that have adopted conservative policy have a high preference for equity financing especially in funding both their permanent current assets and fixed assets but low preference for long-term debt financing (Oloo et al., 2014).

However, the results indicated that the management approach for Kapchorua tea; Reavipingo and Williamson companies adopted a less conservative working capital management approach albeit in an insignificant manner ($P > 0.05$). This could be related to the high level of current liabilities as percentage of total assets that the companies have. This observation reflects the sentiments of Afza and Nazir, (2009) who reported

that an aggressive working capital management approach may be used for the financing decisions of the firm with high level of current liabilities as percentage of total liabilities. According to Oloo et al. (2014), an aggressive policy is where a firm depends more on short term funds for financing its working capital needs hence the firm maintains a high level of short-term liabilities as a percentage of total assets. Companies with larger capacities to generate internal resources have higher current asset levels due to the lower cost of funds invested in working capital for these Companies generated by great cash flows. It was noted that Companies that have a more efficient working capital management strategy registers an increase in operating cash flow (Chiou and Cheng 2006). Indeed, Companies with greater operating cash flows manage working capital more conservatively (Hill et al., 2010; Banos-Cabalaro et al., 2010).

Interestingly, the results indicated that companies that used conservative working capital management approaches were the most profitable while the companies advancing towards aggressive capital management approaches were least profitable (Figure 4.4). Despite recording the highest profit before tax, Sasini and Williamson have the largest total assets. This suggests that most assets are idle hence affecting company's profitability.

The results indicated that the working capital management approach employed by Sasini limited had a significant effect on the company's profitability ($F = 21.64$, $P = 0.002$, $df = 6$) (Table 1.3). This could be attributed to the large company's total asset estimated at Ksh. 8.8 billion, of which a larger proportion could be idle. Nevertheless, Williamson company also had a larger total asset (Ksh. 6.1billion), but their working capital

management approach did not significantly influence the profitability ($F = 0.57$, $P = 0.505$, $df = 6$).

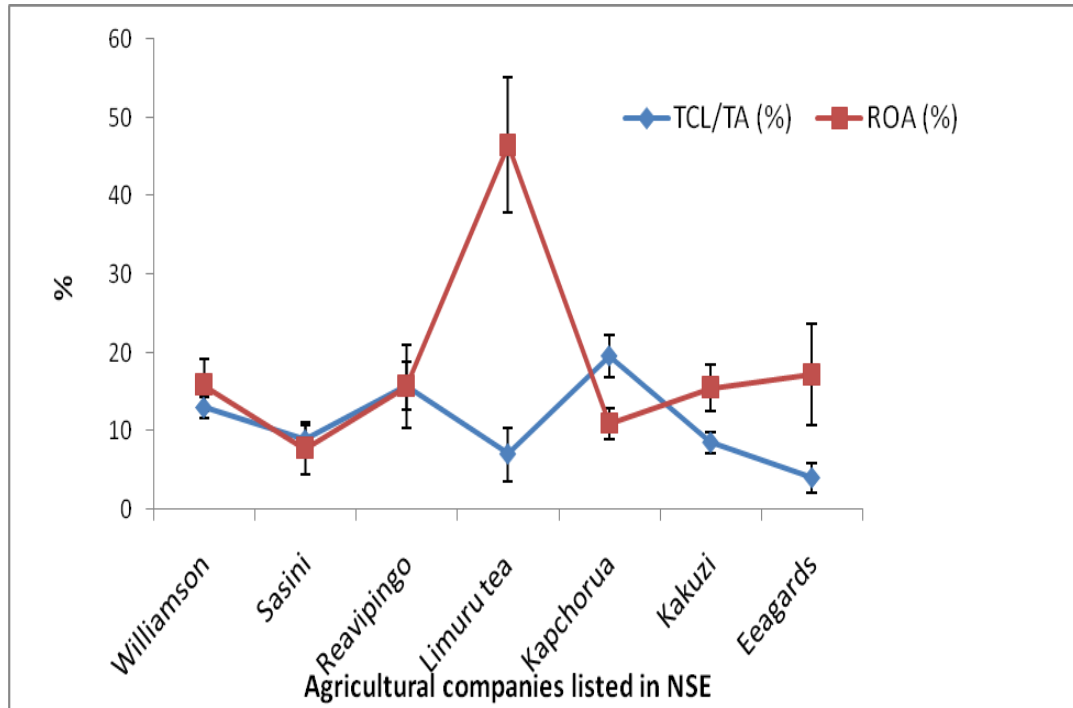


Figure 4.4: The five year average profitability estimate (ROA) and working capital management approaches (TCL/TA) for the 7 agricultural companies listed at the NSE \pm SE

Table 1.4: Summary of mean variables for the agricultural companies listed at the NSE
for 5 years (2009 – 2013)

Variables (Ksh. '000)	Williamson	Sasini	Reavipingo	Limuru	Kapchorua	Kakuzi	Eeagards
Profit before tax	428,363	617,284	340,021	86,748	115,432	551,243	18,145
Finance interest cost	17,529	40,293	5,343	3,600	3,490	6,629	-
Finance interest income	11,793	23,726	-	871	4,104	46,915	-
EBIT	422,645	633,850	345,365	91,219	114,818	508,306	18,146
Total current liabilities	776,363	565,344	313,029	10,078	293,752	269,808	18,203
Total current assets	2,060,599	3,816,866	780,721	104,294	512,599	999,356	73,011
Total noncurrent assets	4,049,336	5,090,548	1,336,057	114,522	923,778	2,442,044	402,936
Total assets	6,106,935	8,838,016	2,116,778	218,816	1,436,377	3,441,400	475,946
ROA (%)	15.87±3.28	7.76±3.26	15.68±5.29	46.48±8.6	10.93±1.92	15.51±2.94	17.18±6.4
TCL/TA (%)	12.98±1.43	8.81±1.91	15.76±3.08	7.04±3.41	19.59±2.68	8.53±1.36	4.00±1.82

4.5 Regression Analysis

The researcher conducted a single linear regression analysis for each company so as to investigate the impact of the working capital management approach on financial performance. The model used for the regression analysis is expressed in the general form as $ROA_i = \alpha + \beta_2 (TCL/TA_i) + \epsilon$. The summary of regression analysis equation and ANOVA for each company are presented in table 1.3

Table 1.5: The summary of SPSS regression analysis and ANOVA data for each company

Companies	Regression Equation	Analysis of Variance (ANOVA)		
		R ²	F value	P value
Williamson	ROA = 4.0 + 0.91 TCL/TA	0.16	0.57	0.505
Sasini	ROA = 21.1 - 1.56 TCL/TA	0.73	21.64	0.002*
Reavipingo	ROA = 17.8 - 0.137 TCL/TA	0.01	0.02	0.898
Limuru tea	ROA= 42.0 + 0.63 TCL/TA	0.06	0.2	0.687
Kapchorua	ROA = - 14.3 + 1.08 TCL/TA	0.39	1.88	0.264

Kakuzi	ROA = 2.93 + 1.47 TCL/TA	0.47	2.64	0.203
Eeagards	ROA = 19.9 - 3.45 TCL/TA	0.23	0.30	0.681

*values which are statistically significant at $\alpha = 0.05$

In this study, a relationship is sought between WCM approach and financial performance of agricultural companies listed at the NSE. The study found a negative relationship between ROA and TCL/TA for Sasini, ReaVipingo and Eeagds companies while a positive relationship existed in Williamson, Limuru, Kapchorua and Kakuzi. This observation is partly consistent with other studies (e.g. Deloof, 2003; Raheman and Nasr, 2007; Shin and Soenen, 1998). However, only the relationship in Sasini company was statistically significant ($P = 0.002$), suggesting a strong influence ($r^2 = 0.73$) of the working capital management approach on the profitability of the firm. This result suggests that the firm can improve profitability by reducing the number of days accounts receivable as customers take less time to pay back bills and more cash is available to replenish inventory. However, Sasini was the least profit making company for the period of study but this could be due to the huge total assets the company controls. The negative co-efficient of the TCL/TA suggests that the more aggressive the company is (an increase in TCL/TA) is associated with a decline in financial performance.

This study holds that managers for Williamson, Limuru, Kapchorua and Kakuzi companies can increase marginally the profitability unit by advancing towards a more aggressive working capital management approach while Sasini, Reavipingo and Eeagards should focus on conservative policies to create value for their shareholders. This finding is consistent with prior research such as Blinder and Maccini (1991). Contrary to findings

by Deloof (2003), the negative relationship between management policy and financial performance is consistent with the view that more profitable firms wait longer to pay their bills since they have a greater bargaining power with their suppliers.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study including limitations, recommendations and suggestions for further research. The analyses of the results have identified critical working capital management approaches for the agricultural firms listed at the NSE and are expected to assist the firm managers in identifying areas to improve their financial performance in day to day operations.

5.2 Summary

This study aimed at establishing the working capital management approaches adopted by the agricultural firms listed at the NSE and further determines the effect of working capital management approach on financial performance of the agricultural firms listed at the NSE. To achieve this, the research used a regression model to test relationship between the ROA and TCL/TA for all the 7 Kenyan listed agricultural companies in NSE from financial years ending December 2009 to 2013. Secondary data from the financial statements sent to CMA and NSE were used in conducting the study.

The study established that all the agricultural firms in the NSE exercise different levels of conservative working capital management approach with other firms such as Kapchorua tea, Reavipingo and Williamson companies appearing to adopt a less conservative working capital management approach compared to the rest.

5.3 Conclusion

The first conclusion drawn from this study was that all the agricultural companies currently listed at the NSE exercise different levels of conservative working capital management approach. However, the working capital management approaches adopted by Kapchorua tea, Reavipingo and Williamson companies embraced a less conservative working capital management approach compared to the rest. Nevertheless, it is only in Sasini limited company where the working capital management approach significantly affects the Rate of Return (profitability).

The study further concluded that companies that adopted more conservative capital management approaches were the most profitable while the companies advancing towards aggressive capital management approaches were least profitable. It was also concluded that investments levels of different companies affected the profitability, where companies with very high total assets were not very profitable. The study concluded that there exists a strong relationship between working capital management approaches and financial performance though the results were insignificant at 5 % α level except for the Sasini tea limited company. Agricultural companies in the NSE aiming at improving financial performance should emphasis on efficient working capital management. It is without doubt that the efficiency in working capital management practices as measured by efficiency in cash management has an influence on the growth rate of businesses.

5.4 Recommendations

The study recommends that the managers of the agricultural companies should avoid holding unnecessary assets, which are not productive because the idle assets have a negative influence on firm's profitability. Also, the agricultural companies should seek knowledge on the use of stock optimization techniques so as to be able to determine right quantities of stock to hold. The study also recommends that similar studies should be conducted for non listed agricultural companies in Kenya to derive a broader conclusion on the effects of WCM approach on agricultural companies in Kenya.

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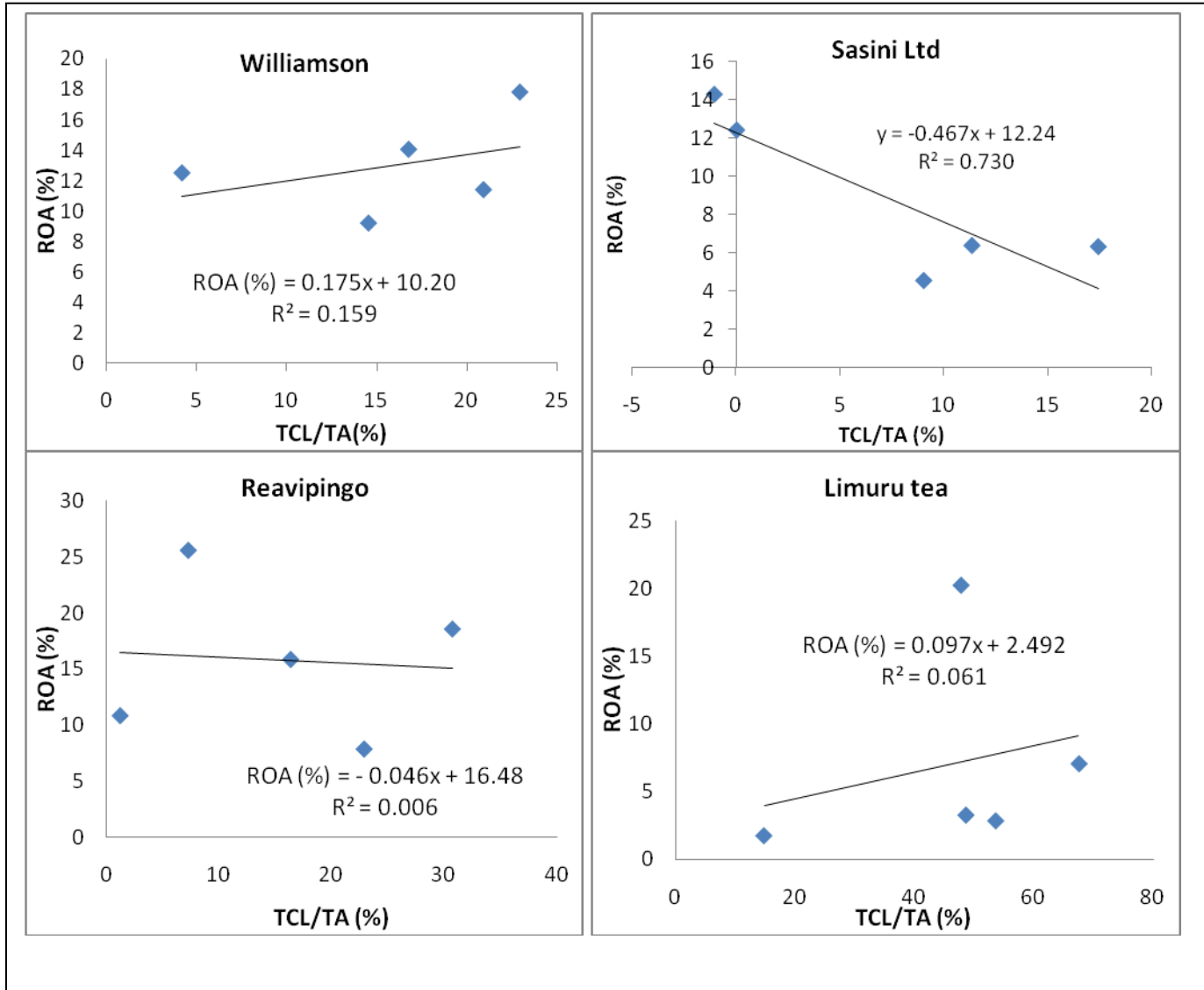
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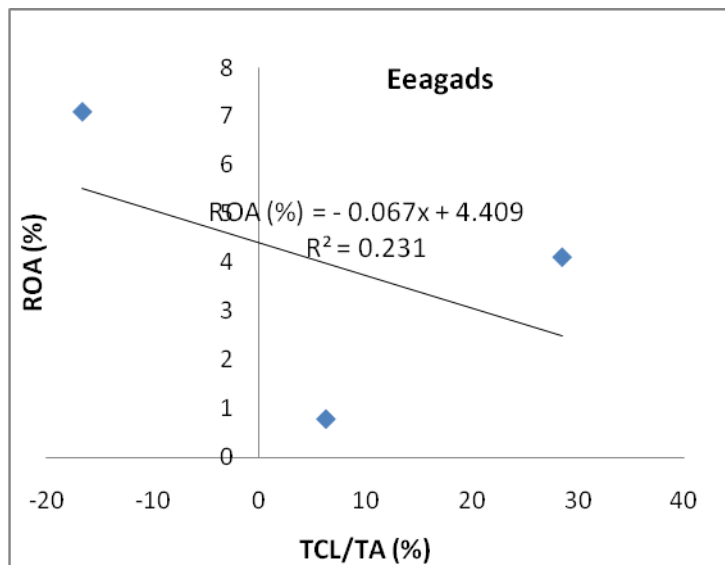
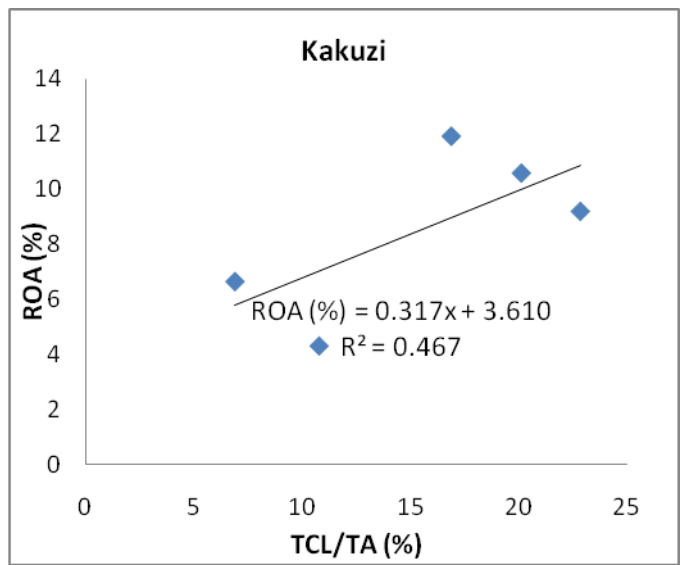
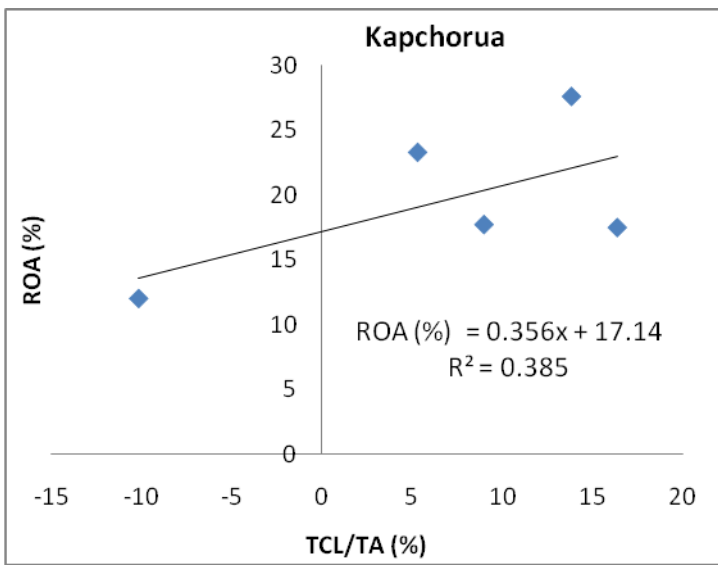
APPENDICES

Appendix 1: List of the Agricultural Companies in Kenya currently listed at the NSE

1. Eeagads Limited
2. Kapchorua Tea Company Limited
3. Kakuzi Limited
4. Limuru Tea Company Limited
5. Rea Vipingo Plantations Limited
6. Sasini Limited
7. Williamson Tea Kenya Limited

Appendix 2: The scatter plots showing the correlation of ROA and TCL/TA for all the agricultural companies listed at the NSE for the Years 2009-2013





**Appendix 3: Financial Reports of the agricultural companies listed at
the NSE for the Years 2009-2013**

Williamson Tea Kenya Limited.

	2009	2010	2011	2012	2013
	KSHS '000	KSHS '000	KSHS '000	KSHS '000	KSHS '000
Profit before tax	145,341	1,223,281	1,293,690	1,163,499	1,155,760
add finance interest cost	18,235	11,143	-	51,480	11,265
less finance interest income	- 151	- 10,757	- 30,328	-	-
EBIT	163,425	1,223,667	1,263,362	1,214,979	1,167,025
Total assets	3,921,165	5,328,706	6,032,743	7,243,227	8,023,834
Total current liabilities	490,105	948,494	687,396	1,017,203	738,619
Total current assets	915,042	1,929,587	2,326,779	2,447,223	2,684,364
Total non-current assets	3,006,123	3,399,119	3,705,964	4,796,004	5,339,470
Total assets	3,921,165	5,328,706	6,032,743	7,243,227	8,023,834

Sasini Tea Limited

	2009	2010	2011	2012	2013
	KSHS '000	KSHS '000	KSHS '000	KSHS '000	KSHS '000
Profit before tax	759,722	1,382,375	1,014,139	- 85,225	15,407
add finance interest cost	71,649	71,923	24,082	27,180	6,631
less finance interest income	- 28,497	- 27,774	- 4,695	-37,357	- 20,308
EBIT	803,871	1,425,527	1,033,526	-95,402	1,730
Total assets	8,912,819	8,184,878	9,115,041	9,054,364	8,922,980
Total current liabilities	407,361	519,045	583,435	731,249	585,628
Total current assets	1,041,011	1,227,656	1,243,233	7,759,321	7,813,109
Total non-current assets	6,957,222	7,871,808	8,218,794	1,295,043	1,109,871
Total assets	8,912,819	8,184,878	9,115,041	9,054,364	8,922,980

ReaVipingo Plantations Limited

	2009	2010	2011	2012	2013
	KSHS '000	KSHS '000	KSHS '000	KSHS '000	KSHS '000
Profit before tax	214,066	103,910	678,846	55,293	647,992
add finance interest cost	17,250	19,631	24,739	- 27,217	- 7,686
less finance interest income	-	-	-	-	-
EBIT	231,316	123,541	703,585	28,076	640,306
Total assets	1,414,084	1,707,016	2,288,740	2,376,618	2,797,430
Total current liabilities	224,412	436,849	425,236	257,984	220,663
Total current assets	502,524	586,491	894,146	879,556	1,040,887
Total non-current assets	911,560	1,120,525	1,394,594	1,497,062	1,756,543
Total assets	1,414,084	1,707,016	2,288,740	2,376,618	2,797,430

Limuru Tea Company Limited

	2009	2010	2011	2012	2013
	KSHS'000	KSHS '000	KSHS '000	KSHS '000	KSHS '000
		104,328	102,504	146,621	41,556
Profit before tax	38,731				
add back finance interest cost	-	-	-	9,000	9,000
less finance interest income	1,801	2,554	-	-	-
EBIT	40,532	106,882	102,504	155,621	50,556
Total assets	84,794	158,305	191,242	320,023	339,715
Total current liabilities	17,138	11,196	5,487	10,536	6,031
Total current assets	65,751	89,227	100,340	130,762	135,391
Total non-current assets	19,043	69,078	90,902	189,261	204,324
Total assets	84,794	158,305	191,242	320,023	339,715

Kapchorua tea Company Limited

	2008	2009	2010	2011	2012
	KSHS '000	KSHS '000	KSHS '000	KSHS '000	KSHS '000
Profit before tax	-103,081	99,735	199,538	268,393	112,576
add finance interest cost	3,254	5,257	7,946	991	-
less finance interest income	-	-	-	- 12,162	- 8,359
EBIT	- 99,827	104,992	207,484	257,222	104,217
Total assets	982,058	1,167,797	1,498,931	1,570,203	1,962,897
Total current liabilities	117,585	206,571	413,617	274,093	456,895
Total current assets	208,461	347,641	678,761	575,942	752,190
Total non-current assets	773,597	820,156	820,170	994,261	1,210,707
Total assets	982,058	1,167,797	1,498,931	1,570,203	1,962,897

Kakuzi Limited

	2009	2010	2011	2012	2013
	KSHS '000	KSHS '000	KSHS '000	KSHS '000	KSHS '000
Profit before tax	558,890	558,629	920,093	479,299	239,306
add finance interest cost	19473	414	-	-	-
less finance interest income	-	- 15,357	- 47,668	- 93,580	- 77,971
EBIT	578,363	543,686	872,425	385,719	161,335
Total assets	2,873,255	3,218,590	3,817,320	3,575,995	2,338,522
Total current liabilities	304,131	383,678	351,157	154,459	155,617
Total current assets	618,438	795,569	1,174,645	1,237,473	1,170,655
Total non-current assets	2,254,817	2,423,021	2,642,675	2,338,522	2,551,183
Total assets	2,873,255	3,218,590	3,817,320	3,575,995	3,721,838

Eeagads Limited

	2009	2010	2011	2012	2013
	KSHS'000	KSHS '000	KSHS '000	KSHS '000	KSHS '000
Profit before tax	-	-	101,480	36,178	- 83,223
add finance interest cost	-	-	-	9	-
less finance interest income	-	-	- 14	-	8
EBIT	-	-	101,466	36,187	- 83,215
Total assets	-	-	354,922	573,356	499,561
Total current liabilities	-	-	14,604	4,530	35,475
Total current assets	-	-	86,803	84,987	47,242
Total non-current assets	-	-	268,119	488,369	452,319
Total assets	-	-	354,922	573,356	499,561