EFFECT OF WORKING CAPITAL MANAGEMENT AND ASSET QUALITY ON FIRM PROFITABILITY AMONG MANUFACTURING FIRMS LISTED IN NSE

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D63/79017/2015

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE

UNIVERSITY OF NAIROBI

OCTOBER 2016

DECLARATION

I hereby declare that this research project is my original work; it has not been presented to any other institution of higher learning for academic purposes.

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Signed …… Date. ……..

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

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DEDICATION

I dedicate this work to my entire family, all my lecturers, my classmates and my colleagues for their backing, encouragement and patience throughout the whole period of my study and their continued prayers towards successful completion of my course.

ACKNOWLEDGEMENT

I remain indebted in gratitude to my supervisor James Ng'ang'a support; advice, supervision, dedication and time have made it possible to completion of my work. My special message goes to my family, particularly my wife Fatuma Ahmed who has been my source of encouragement and support throughout my studies. Also wish to remember all those who have contributed in the completion of my in one way or another; without forgetting the greatness of GOD who enabled me to complete this piece of work, without his guidance and greatness it would have not been possible.

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ABSTRACT

The victory and survival of any firm depends largely on the systematic management of its working capital majorly the manufacturing sector that requires to adopt proper and effective management so as to increase the level of performance and increase the margin of contribution to the economic growth; the study is intended to examine the effect of **working** capital management and asset quality will have on firm profitability among manufacturing companies listed in NSE. The study was anchored on four major theories namely contingency, configurationally, risk-return trade off and asset profitability theories. The study utilized descriptive research design. The study targeted a population 10 manufacturing firms listed in Nairobi Securities Exchange as at 31st December 2015. Secondary data was used which was pulled from the companies audited income statements and statement of financial position posted in their respective website. This study used multiple linear regression analysis to decide the influence of working capital and asset quality management has on the outcome of a company. The study concludes that credit collection policy that facilitates low average collection period ensured the firms' healthy cash flows and improved liquidity position, increase in inventory turnover period promotes the financial performance of firms listed in NSE, account payables plays a crucial function in the organization and coordination of working capital in that the postponement in the payment of bills is one among the techniques used by managers to source for non-expensive funds and that postponement of the payment of the payables due can be costly to the firm if its given a discount to settle its bills early. If the cash conversion cycle improves it will equally have an impact on the profitability of the firm by increasing it. Therefore cash conversion cycle current ratio explains a true picture of the effectiveness of a company's operating cycle and also its ability to convert the products of the company into cash in shorter period. The condition of assets is a crucial instrument to portray the power of the firm and deterioration of asset quality will seriously impacts on both the operating and financial capability of firms listed in NSE. Low debt ratio implies that firms have a chance to utilize leverage as a better way of growing the company while a greater percentage of debt-to-equity ratio explains that a firm may fail to initiate sufficient funds to meet its obligations when it's due. Big companies enjoy greater favourable conditions such as enjoying economies of scale which gives better position enabling the company to produce efficiently; have more bargaining power to its advantage when dealing with both creditors and distributors or even clients. The study recommends that firms should create a credit collection policy setting out the procedures and practices to be used by the company to collect overdue or delinquent accounts receivable. This policy should allow for simultaneous use of a combination of several collection strategies that ensures that firm not only improves its cash flow by shortened average collection period but also does not suffer bad debt losses. Firms should maintain leverage ratio at a standard level. This is based on revelation that high debt can be risky to the firms and its investors as unchecked debt levels can push a company to credit unworthiness while at the same time small debt-to-equity ratios can portray an indication the firm is not utilizing the opportunity of the excess returns that are brought by the financial leverage. For asset quality, Firms need to improve their processes of screening debt management; manufacturing companies must look into their capital levels in bid to enhance their capital levels and as a result increase their financial performance. This will give the manufacturing firms an opportunity not to be exposed unprecedented financial failures, but to be in the front line to benefit from business opportunities as they arise and in the process improve their financial health.

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

Without considering the structure of its ownership, when investors invest in business firms they expect one thing from their investment that is good returns without considering the locality or the geographical position of the firm all over the world. Owners have a direct or indirect influence on the day to day running of their business when it comes to small or medium sized businesses, they are entirely responsible for its success or failures. For large companies the issue is on the contrary; the management i.e. Day to day running of the company is done by managers who are independent of the owners of the company. The managers of the company will be responsible for the success or failures of the company. The managers must strive to increase the value of the business, which is one of the objectives of the business. Critical decisions are undertaken by the managers who entrusted to run the business by its owners. This are decisions which will affect the business in terms of its profitability, financial performance and increased market share which contributes to the maximization of the shareholders wealth.

The study was guided by two theories value chain theory and asset profitability theory. Value chain theory assists managers of companies in the inventing and calculation of the worth of the value of the business without ignoring control and optimization objectives. Especially, the cash flows technique which is considered when making calculations gains created companies (Scherr, 1989). Asset profitability theory, management and efficiency of the working capital is useful when considering both manufacturing and construction firms, who have a highest percentage of their

assets made up of current assets. This has great influence on both liquidity and productivity of the businesses. The compromise between liquidity and profitability is quite important necessitating the need to proper management and control of working capital that's eliminating vulnerability of companies to failure and bankruptcy. The usefulness of efficient coordination and control of working capital cannot be underrated. Working capital is the heart of any business just like the human body which pumps blood to all parts, and its control is seen as one the most crucial roles of corporate management. In many organization whether it's a profit making or non-profit making; whether big or small without withstanding the condition of the business needs appropriate level of working capital so as to undertake its intended purpose without any problem.

1.1.1 Working Capital Management and Asset Quality

The difference between current asset and current liabilities of a firm is termed as working capital. This shows the health of the firm; whether the firm can appropriately make payments to its suppliers or other commitments when their time is due. Proper and consistent working capital management will utilize the best techniques which will minimize the risk brought by inability to meet obligation when fall due. This will also reduce the instance of over investment in current assets; that will be an opportunity cost to the company.

The coordination and control of working capital brings in both the aspects of profitability and liquidity issues and suggests a well-known dimension for profitability and liquidity of the firm.

Most of the organizations, liquidity position is a subject of concern that should be keenly kept under investigation by financial managers for the smooth running of the

organization. Organization should keep a balance between risk and return, where there are more returns from an investment, equally the risk is said to be high. And on the other hand where the risk is low; the returns from such an investment are said to be low. If an organization opts for risky investment with a high returns then it's said to be an aggressive technique and the opposite is said to be conservative technique. Which technique an organization adopts there must be a balance between risk and the assorciated returns.

Sathamoorthi (2002) states that increase in current asset to total asset has a negative effect on profitability, while an increase in current liabilities to overall liabilities will bring a positive impact on profitability. For organization to have effective and efficient working capital it must opt to develop a plan to a balance between the various components that substitute the larger picture of capital management; this is major objective working capital management. The ratio between total firm assets and working capital will indicate the liquid cash of the company at different time intervals. The effective coordination and control of the firm receivables; payables and the inventories is a corner stone for the success of any company; this acts as litmus paper for the ability of finance managers to effectively control this components for the greater success of the company.

Credit risks are among the elements that affects the wellbeing of business organization. The degree of the credit risk will rely on the performance and quality of assets that is possessed by the company. The characteristic of assets held by an organization will depends on the extent to which they are prone to particular peril, the performance and the gains the organization makes in its activities. The profitability of companies will highly be dictated by its strength to predict risk, and

the plans the company will put in place to counter react those risks when they happen to the organization. This will give an opportunity to the company to avoid uncessary losses while maximizing the outcome of its daily activities. The substandard of the asset an organization will have a fair contribution to the wellbeing of the company just like the liquidity, the firms must aim to have and keep the right level of asset interms of quality and number.

1.1.2 Firm Profitability

The ability of a business to earn income is known as profitability. This ability depends on the effectiveness and efficiency of its operation as well as the resources available to it (Warren and Reeve, 2006). Ross, Westerfield, & Jordan (2010) discussed the three measures as the greatest recognized and most extensively utilized of all financial ratios which are profit margin, return on assets (ROA) and return on equity (ROE).

Ability of businesses to generate and earn an acceptable amount of returns from its business activities is known as profitability. The coordination, organization and control of Working capital items greatly affects the gains of the company in several ways. The control and coordination of working capital components such as cash, debtors and stocks contributes negatively or positively to the level of profits earned by firms. Keeping a high level of stock or inventories will have negative consequences to the overall performance of the firms. There is a high costs associated with high level of stocks and all these costs will negatively affects the profits of the form. Equally when the firm fails to maintain the right size of stock it will also contribute negatively in terms of stock outs which have the impact of loss of customers, good will and profits.

1.1.3 Working Capital Management and Asset Quality on Firm Profitability

Coordination and control of working capital is a crucial pillar in manufacturing firms. A higher percentage of their assets are made up of current assets. The balancing between profitability and liquidity is crucial in the sense that if the components of working capital is properly coordinated, organized and controlled it will lead to serious consequences of the firm failing to reach its intended objectives and may even be closed down due to liquidity problems. The heart of every business is the working capital, this can lead liquidity problems if it's not well checked. Due to its importance every organization despite its size or growth level will require to seriously control and coordinate the main ingredients of working capital. Without proper coordination and control of this components the firms will face serious challenges like liquidity and the end will bankruptcy and closure.

Working capital management efficiency and asset quality are important items in manufacturing firms. Greater segment of the firm's assets is made up current assets. The balance amongst profitability and liquidity is paramount for the smooth running of the firms and need to be controlled at all levels. The importance of coordination and control of working capital components and asset quality of the firm cannot be underestimated. Working capital and asset quality acts as central pivots for successful growth of the firm, they are termed as life giving force and its coordination and control are per amount important to every organization. Every business whether big or small; profit making or not need effective and efficient coordination and control of its working capital and asset quality. Working capital and asset quality are the most vital factor for upholding liquidity, existence, creditworthiness and success of business.

1.1.4 Manufacturing Firms Listed at the Nairobi Securities Exchange

There are presently 10 manufacturing companies registered at the NSE .The manufacturing sector in Kenya has been identified as a key player for achieving a sustained annual growth in GDP of 10% in the past 10 yrs. Manufacturing firms production expanded by 3.4% compared to the growth of 2013 at 5.6%. The sectors volume of output increased by 4.5% in 2014 (Economic Survey Report, 2015)

Manufacturing sector in kenya is considered as one among the key pillars in the growth of the economy. The government of is putting a lot of efforts in the realizations and development of this sector, in vision 2030 , the government has stated the need to have sector growth at a rate of 8% as one of its key pillars in the attainment of vision 2030. Achieving such kind of growth percentage is only possible if the companies attains steady growth of profits which will highly depend on the level of control and coordination that is accorded to contributing factors of the firms profits such as the working capital. Firms aim at a higher standard of working by adopting technological changes that are witnessed around either in terms of system or latest manufactured equipment's and techniques, and will also add into cost saving approaches of the leaving with better liquidity to service its immediate needs.

1.2 Research Problem

Systematic organization and control of working capital components is high priority for all business units specially manufacturing firms to increase their chances of growth and good performance as expected by the investors of the sector. Manufacturing firms must work hard to implement proper plans to have effective balance between the various components making up the working capital of firms. Coordination and control of working capital and asset quality are crucial and import

integral part of corporate finance because it affects the overall function the entire organization. There are no predeveloped rules to guide and give the required direction when we talk of optimum level of working; different companies will require different levels of working capital since there are no precise guidelines to direct in the development of optimum level of working capital, we must use past experience and most reasonable decision to identify the optimum levels in terms of working capital and asset quality.

The industrial sector is considered as One the biggest units, the sector comprises of four sub-sectors which include automobile and accessories, construction, energy and petroleum, and manufacturing sectors. The significance of this sector cannot be underscored by the fact that it contributes to the country Gross Domestic products. The sector sells its products different markets both internal and external markets part of it being the larger east Africa region. The sector, culminated both local companies and internationally owned companies which set up locally registered subsidiaries. Due to its considerable importance the sector requires appropriate level analysis and study both at firms level and industry wise, according to the information available in NSE ltd there are only ten registered companies as of 2016. The significance systematic control and coordination of working capital and asset quality to manufacturing firms cannot be underrated. However, it remains hitherto quite unclear regarding the extent to which management of working capital and asset quality influences net income of manufacturing companies particularly in Kenya.

Numerous researchers have carried out investigation on management of working capital, asset quality and their impacts on the net business income, however not much research has been done on its impacts on the gains of manufacturing firms.

International studies inlude Onodje (2014) who did a study on the outcome of proper working capital management on sample of manufacturing businesses from his country. From his regression models he established that efficient working capital and debt management are critical in improved manufacturing company's performance in Nigeria. Ani et al. (2012) did a research on effects of working capital management on profitability using five top brewery companies in the world and her study showed that the different working capital components have impacts on beer brewery firms' profitability. However, the study was done in a different geographical environment with the current study. Ponsian, Kiemi, Gwatako and Halim (2014) established an opposite association among liquidity and profitability which showed that when liquidity decreases, the profitability on the other hand increases. Khalid, (2012) investigated the effect of Asset Quality on the Profitability of Private Banks in India. The outcome revealed that asset quality has an effect on the profitability and performance of the bank especially when the asset ratio is bad. However, the study was done on banks and thus could not be generalized in manufacturing sector.

Some local studies include but are not limited to "effect of WCM on shareholder value. Nzoka, (2015) did a study as a study on the effect of assets quality on the financial performance of commercial banks in Kenya. The analysis showed that all the asset quality factors had a fairly statistical significant impact on financial performance. Mwendwa (2015) investigated the relationship between asset quality

and profitability of commercial banks in Kenya. The study revealed that asset quality positively influences ROA of commercial banks. Waithaka (2012) Researched on effect of WCM on performance of agricultural companies listed in the NSE. Using a correlation analysis she established that there was a positive relationship between WCM and profitability of an agricultural firm, however the research was on agricultural firms listed in the NSE. Mutungi (2010) studied the relationship between working capital management and financial performance of oil marketing firms in Kenya. From the correlation analysis, the study concluded an existence of aggressive working capital policy in the oil sector. Given that no study has been done on the effect of working capital management and asset quality on firms' performance in the manufacturing sector in Kenya, this study seeks to bridge the gap by undertaking a study on the same. The question that this study shall seek to answer is; is there a relationship that exists between working capital management practices and asset quality employed by the firm and profitability in the listed manufacturing companies in Kenya?

1.3 Objective of the Study

To establish the effect of working capital management and asset quality on firm profitability among manufacturing firms listed in NSE

1.4 Value of the Study

The study will shed more light on how a firm is affected by the WCM and asset quality and what steps can be taken to ensure the firm archives its main objective which is maximizing shareholder wealth.

The study will shed more light on how a firm is affected by the WCM and asset quality and what steps can be taken to ensure the firm archives its main objective

which is maximizing shareholder wealth. Management of the firms can use this research to effectively manage their WC and asset quality to enhance performance. This will build up on existing knowledge and theories on the working capital management of manufacturing companies.

This study will be of use to security analysts, financial analysts, stock brokers and other parties whose knowledge of the relationship between working capital management and asset quality and the firm profitability is an important input into investment analysis and portfolio investments.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter entails theoretical review, determinants of firms' performance as well as empirical studies on the effect of working capital on performance of firms. The chapter summary at the end highlight key observations from theoretical review as well as gaps noted in the review of empirical studies that this particular study seeks to fill.

2.2 Theoretical Review

In theoretical review, this paper reviews four major theories namely contingency, configurational, risk-return trade off and asset profitability theories.

2.2.2 Value chain theory

If firms are to remain competitive, they have to manage costs effectively and this requires a broad approach, internal and external to the firm, that Porter (1985) calls the value chain. The value chain consists of the interconnected value creating activities of a firm, starting with activities related to the purchase of basic raw material sources from suppliers to delivering the product to ultimate consumers. According to Porter the objective of a value chain strategy is to increase competitive advantage through cost minimisation, product differentiation, lower transaction costs, improved co-ordination between firms in the value chain, improved performance and/or reduced uncertainty. Porter's value chain theory considers a firm as composed of discrete but related internal and external activities, including aspects like receivables management, cash management, payables management and inventory management. Porter's value chain theory provides a method of breaking down these

value creating chains of activities into strategically relevant activities in order to understand the behaviour of costs and the sources of differentiation.

2.2.4 Asset Profitability Theory

Asset profitability theory by Sathamoorthi (2002) states that increase in current asset to total assets ratio has a negative effect on firms' profitability, while on the other hand, increase in current liabilities to total liabilities ratios has a positive effect on profitability of firms. This theory notes that decrease in current asset to total assets ratio as well as increase in the ratio of current liabilities to total liabilities ratios, when considered independently, lead to an increased profitability coupled with a corresponding increase in risk. Increase in the ratio of current assets to total assets decline in profitability because it is assumed that (i) current assets are less profitable than fixed assets; and (ii) short-term funds are less expensive than long-term funds. Decrease in the ratio of current assets to total assets will result in an increase in profitability as well as risk. The increase in profitability will primarily be due to the corresponding increase in fixed assets which are likely to generate higher returns because corresponding increase in fixed assets which are likely to generate higher returns (Sathamoorthi, 2002).

On the other hand, Sathamoorthi (2002) points that effect of an increase in the ratio of current liabilities to total assets would be that profitability will increase. The reason for the increased profitability lies in the fact that current liabilities, which are a short-term source of finance, will increase, whereas the long-term sources of finance will be reduce. As short-term sources of finance are less expensive than long-run sources, increase in the ratio will mean substituting less expensive sources for more expensive

sources of financing. There will therefore be a decline in cost and a corresponding rise in profitability.

In summary, what informs the needs for this research is the contradicting approach and theoretical argument of the effect of working capital on firm's profitability by Deloof and Jegers, (1996) and (Sathamoorthi, 2002). While Deloof and Jegers, (1996) states that large inventory and a generous trade credit policy may lead to high profitability because it stimulates sales, Sathamoorthi (2002) on the other side argues that increase in proportion of current assets to total assets leads to decrease in profitability because fixed assets are likely to generate higher returns. Deloof and Jegers, (1996) seems to support the aggressive policy of working capital management. An aggressive policy with regard to the level of investment in working capital means that a company chooses to operate with lower levels of inventory, trade receivables and cash for a given level of activity or sales. An aggressive policy will increase profitability since less cash will be tied up in current assets, but it will also increase risk since the possibility of cash shortages or running out of inventory is increased. An aggressive funding policy uses shortterm funds to finance not only fluctuating current assets, but some permanent current assets as well. This policy carries the greatest risk to solvency, but also offers the highest profitability and increases shareholder value.

2.3 Determinants of Firm Profitability

2.3.1 Working Capital Management

According to Deloof (2003) majority of the firms invested significant amount of cash in working capital and using trade payable as a key source of financing. So the way it is handled can have a significant impact on the profitability of the firm. Lazaridis and

Tryfonidis (2006) indicated that operating profitability will indicate how the management will respond in terms of managing the working capital components. This is because they identified a negative relationship between the working capital components and the profitability. Ganeshan (2007) further argues that profitability of the firms can be increased through efficient management of working capital. Vishnani (2007) further stressed that each and every company has to be careful when investing huge amount of funds in working capital, this is because it can reduce the profitability of the company significantly.

Mohamad and Saad (2010) did a study on the effect of market valuation and profitability in Malaysia and found that current ratio is negatively significant to financial performance of Malaysian firms. Eljelly (2004) did an empirical study on the relationship of liquidity and profitability as measured by current ratio and cash gap on stock companies in Saudi Arabia and found significant negative relation between the firm's profitability and its liquidity level, as measured by current ratio using correlation and regression analysis.

2.3.2 Asset Quality

Efficient management of assets plays an important role of overall corporate strategy in order to create shareholder value. Asset quality is regarded as the result of the time lag between the expenditure for the purchase of raw material and the collection for the sale of the finished goods. The way of managing assets can have a significant impact on both the liquidity and profitability of the company (Shin & Soenen, 2011). The main purpose of any firm is to maximize profit. But, maintaining liquidity of the firm also is an important objective. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm. Thus, strategy of firm must maintain a balance between these two objectives of the firms. Dilemma in asset

quality is to achieve desired tradeoff between liquidity and profitability (Smith, 2011; Raheman & Nasr, 2007). Referring to theory of risk and return, investment with more risk will result to more return. Thus, firms with high liquidity of assets may have low risk and low profitability. Conversely, a firm that has low liquidity of assets faces high risk which results to high profitability

2.3.3 Leverage

According to Rajan and Zingales (1995), leverage can be defined as the ratio of total liabilities to total assets. It can be seen as alternative for the residual claim of equity holders. Aquino (2010) studied the capital structure of listed and unlisted Philippine firms. His study showed that high debt ratio is positively associated with the firm's growth rate and profitability. Joshua (2005) research paper revealed significant relationship between the ratio of total debt to total assets and ROE. The results of Aivaziana (2005) examined the impacts of financial leverage on the investment decisions and found that there is a negative relationship

Liquidity is the available cash for the near future, or any asset that can be easily and cheaply converted to cash. A firm can use its readily available cash to finance its operations when the long-term financing is not available. Readily available cash also helps to deal with its obligations when the earnings are low, and can also help in meeting unexpected emergencies. Almajali et al. (2012) found that firm liquidity had significant effect on Financial Performance of firms. It is therefore important that companies increase their current assets and decrease current to improve on liquidity

2.3.4 Firm Size

Vijayakumar and Tamizhselvan (2010) found a positive relationship between firm size and profitability. Papadogonas (2007) conducted analysis on a sample of 3035 Greek manufacturing firms and revealed that for all size classes, firms' profitability is positively influenced by firm size. Lee (2009) examined the role that a firms' size plays in profitability. Results showed that the firm size plays an important role in explaining profitability. Amato and Burson (2007) tested size-profit relationship for firms operating in the financial services sector. With the linear specification in firm size, the authors revealed negative influence of firm size on its profitability. Ammar, Hanna, Nordheim, and Russell. (2003) found no significant relationship between firm size and gross operating profit ratio. The study of Falope and Ajilore (2009) also found no significant variations in the effects of working capital management between large and small firms in Nigeria using a sample of 50 quoted companies.

Various researchers have argued that the size of the company is one of the factors that have the largest influence on the stock prices of firms (Allen & Rachim, 1996). But even though the majority of the previous studies have concluded that size is an important factor, the measurements of size have varied between studies. Holder, Langrehr, and Hexter (1998) used the natural logarithm of sales as a measurement of the size while (Daunfeldt, Selander & Wikström, 2009) used the logarithm of the number of employees in order to measure the size. In this study, a net assets per share was used as a proxy for firm size.

Hvide and These (2007) in their study concluded that larger firms have better performance. Flamini et.al (2009) suggested that bigger firms are more competitive

than smaller firms in harnessing economies of scale in transactions and enjoy a higher level of profits. Athanasoglou et al., (2005) assert that increase in company size increases the performance of the bank. Almajali et al (2012) argued that the size of the firm can affect its financial performance. However, for firms that become exceptionally large, the effect of size could be negative due to bureaucratic and other reasons (Yuqi 2007).

2.4 Empirical Evidence

Ani et al. (2012) studied on the effects of working capital management on profitability: evidence from the top five beer brewery firms in the world. They focused on working capital management as measured by the cash conversion cycle (CCC), and how the individual components of the CCC influence the profitability of world leading beer brewery firms. Multiple regression equations were applied to a cross sectional time series data. The study found that working capital management as represented by the cash conversion cycle, sales growth and lesser debtors' collection period impacts on beer brewery firms' profitability. His study only focused on the inventory, payables and receivables turnover ratios and not their levels or their proportion to the total assets and liabilities. The study also only looked at only top five bear companies in the world and therefore this may not be representation of all manufacturing firms. This study also is not representative of African Manufacturing firms.

Melita, Elfani and Petros (2010) empirically investigated the effect of working capital management on firm's financial performance in an emerging market. Their data set consisted of firms listed in the Cyprus Stock Exchange for the period 1998-2007. Using multivariate regression analysis, our results revealed that working

capital management leads to improved profitability. Specifically, results indicate that the cash conversion cycle and all its major components; namely, days in inventory, day's sales outstanding and creditors' payment period – are associated with the firm's profitability. This study covered all firms and not specifically on manufacturing firms. Different industries have their own specific characteristics and therefore, what favours one industry may not favour the other industry. For instance, manufacturing firms have to consider manufacturing plants that convert raw materials into finished good while commercial industries don't have plants since they only deal with finished goods. Also, unlike manufacturing industry, raw materials are never part of inventories for the commercial industry. Therefore, assuming that the effect of working capital on profitability is the similar for each is misleading.

Kulkanya (2012) study established Effects of Working Capital Management on the Profitability of Thai Listed Firms. The regression analysis was based on a panel sample of 255 companies listed on the Stock Exchange of Thailand from 2007 through 2009. The results revealed a negative relationship between the gross operating profits and inventory conversion period and the receivables collection period. The study concluded that managers can increase the profitability of their firms by shortening the cash conversion cycle, inventory conversion period, and receivables collection period, but cannot increase profitability by lengthening the payables deferral period.

Ponsian, Kiemi, Gwatako and Halim (2014) carried out study is to find out the effect of working capital management on company profitability. The study aims at examining the statistical significance between company's working capital

management and profitability. In light of this objective the study adopts quantitative approaches to test a series of research hypotheses. A sample of three manufacturing companies listed on the Dar es Salaam Stock Exchange (DSE) is used for a period of ten years (2002-2012) with the total of 30 observations. Data was analyzed on quantitative basis using Pearson's correlation and Regression analysis. Findings were that there exists a positive relationship between cash conversion cycle and profitability of the firm. It also established a negative relationship between liquidity and profitability showing that as liquidity decreases, the profitability increases. The third finding was that there exists a highly significant negative relationship between average collection period and profitability. It further found that there is a highly significant positive relationship between average payment period and profitability. The gap in this study is that the key focus was on payment period. Also, the sample was of only three manufacturing firms and it may not be representation of the entire industry in Tanzania, let alone Kenya.

Kosmidou (2008) applied a linear regression model on Greece 23 commercial banks data for 1990 to 2002, using ROA and the ratio of loan loss reserve to gross loans to proxy profitability and asset quality respectively. The results showed a negative significant impact of asset quality to bank profitability. This was in line with the theory that increased exposure to credit risk is normally associated with decreased firm profitability. Indicating that banks would improve profitability by improving screening and monitoring of credit risk.

Waithaka (2012) as well did her study on the relationship between working capital management practices and financial performance of agricultural companies listed at

the Nairobi securities exchange. The study adopted a Correlational or Prospective Research Design which attempted to explore the relationship between working capital management and financial performance to make predictions with the use of two or more variables for each. The findings of the study were that, financial performance was positively related to efficiency of cash management (ECM), efficiency of receivables management (ERM) and efficiency of inventory management (EIM). The gap in her study is that she focused on Agricultural firms. Further, just like Mwangi (2013), her study focused on Average Collection Period, Inventory Collection Period, Average Payables Period and Debt Ratio and not on the levels of current assets and liabilities.

Wamugo, Muathe and Kosimbei (2014) examined the Effects of Working Capital Management on Performance of Non-Financial Companies. A census of 42 non-financial companies listed in the Nairobi Securities Exchange, Kenya was taken. The data were extracted from the Nairobi Securities Exchange hand books for the period 2006-2012. Feasible Generalized Least Square (FGLS) regression results revealed that an aggressive financing policy had a significant positive effect on return on assets and return on equity while a conservative investing policy was found to affect performance positively. The gap in this study is its failure to segregates their findings on the Effects of Working Capital Management on Performance per industry. What favours manufacturing companies many not necessarily favour the trading companies because of the nature of their business. Manufacturing have raw materials in their inventory. Trading companies don't. Trading companies such as supermarkets sell to individual customers whose buying behaviors can be unpredictable. Also, selling to individual customers may not favour credit sales. This is totally different in the case

of manufacturing firms whose customers are trading firms that buy in bulk, are unlikely to default debt and have predictable buying behavior.

2.5 Conceptual Model

The Conceptual model gives a depiction on how the variables are related to one another. The variables defined here are the independent (explanatory) and the dependent (response) variable. An independent variable influences and determines the effect of another variable. The independent variable in this study is working capital and Asset quality. Dependent variable is that factor which is observed and measured to determine the effect of the independent variable. The dependent variable is firm profitability. Control variables are extraneous factors, possibly affecting the experiment, that are kept constant so as to minimize their effects on the outcome. In this study the control varibles are firm size and leverage.

2.6 Summary

Mathuva (2009) studied the impact of working capital management on the performance. He found out that there is a negative relationship between the time when the cash is collected from the customers and the firm's productivity. Secondly, there is a positive relationship between the inventories when they were brought in and the period to which they are sold and the firm's profitability. It is clear that from the global review, researchers have established mixed results on the effect and relationship between working capital and assets quality and performance on different periods in time. It is also clear from the empirical review that little if any has been done by the local studies to systematically establish the relationship between working capital and assets quality and the overall performance of firms in Kenya. A number of studies have been done relating to working capital management and its effect on

profitability but few has exploited on the implication of profitability of manufacturing firms. Therefore this study is aimed at filling the gap on working capital management and asset quality and its implication on profitability of manufacturing firms listed in NSE in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was followed in the process of conducting the study. The chapter begins by setting out the research design that wasused to enable the researcher achieve the objectives of the study. The target population, tools and techniques for data collection, data analysis and presentation are discussed.

3.2 Research Design

A research design is the design of study that defines the study type. It is a systematic arrangement of the measures, factors and the tools to be applied in the collection and analysis of the obtained data in order to achieve the objectives of the study in the most efficient and effective way. Kothari (2004) concluded that a research design directs the researcher by offering him with guidelines on how to collect, analyze and interpret the data in a coherent manner. The study employed descriptive research design. Cooper and Schindler (2011) define descriptive research design as a design used to describe behavior or characteristic of a population being studied. The design fits the proposed study which sought to determine the relationships between variables that is working capital management and assets quality and firm profitability. Further, the design is dependable, valid and generalizable in this kind of a research in that it is good for the purpose of data collection and analysis.

3.3 Population

Mugenda & Mugenda (2003) defines population as an entire group of individuals, events or objects having common observable characteristics. Therefore, this section looks at the population identified and it is from the results of this group that the results were generalized to the entire population. The target population in this study were all the 10 manufacturing companies listed in the Nairobi Securities Exchange as at 31st December 2015. (As per Appendix I)

3.4 Data Collection

This study used secondary data from the companies audited income statements and statement of financial position posted in their respective website. Use of data from audited financial statements gives an assurance on the validity and reliability of data collection method as well as the accuracy of data collected.

3.5 Data Analysis

This study used multiple linear regression analysis to determine the effect of the working capital and asset quality on the performance of a firm as measured by its Return on Asset. Kothari (2004), regression analysis is concerned with the study of how one or more variables affect changes in another variable.

3.5.1 Analytical Model

The linear regression model used to determine the effect of levels of working capital and asset quality on performance wasas follows

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_{8+} e$$

Where; α = Independent

Variable Y=Firm's performance measured by Return on Assets (ROA)

Bi = coefficient of dependent variable which measures the changes in Y with a unit change working capital i

X_1 = Average Collection Period

X_2 = Inventory turnover period

X_3 = Average payment period

X_4 = Cash conversion

X_5 = Current ratio

X_6 = Asset quality measured by Total Investments to Total Assets

X_7 = Leverage as measured by Debt Ratio (Debt Ratio = Total Debt/Total Asset)

X_8 = Size of the firmed as measured by natural log of total assets

e = Error Term

3.5.2 Test of Significance

F-test was used to test the joint significance of all coefficients and t-test for the test significance of individual coefficients. The significance of the regression model was determined at 95% confidence interval and 5% level of significance

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents analysis and findings of the research. The objective of this study was establish the effect of working capital management and asset quality on firm profitability among manufacturing firms listed in NSE , the study period was between 2011-2015

4.2 Descriptive statistics

Table 4.1: Average collection period

Years	Days	Turnover ratio	Average collection period
2011	365	10	36.50
2012	365	11	33.18
2013	365	12	30.42
2014	365	9	40.56
2015	365	8	45.63

Source: Research findings (2016)

From the results, the lowest average collection period was 30.42 in the year 2013 while the highest was 45.63 in 2015 the findings revealed that there have been a significant increase in Average collection period during the five -year period

Table 4.2: Inventory turnover period

Years	Cost of goods sold (Sales)	Average inventory	Inventory turnover period (times)
2011	3.251	8.927	0.182
2012	4.352	9.326	0.233
2013	9.632	17.269	0.279
2014	19.325	26.351	0.367
2015	18.915	28.325	0.334

Source: Research findings (2016)

From the results, the lowest inventory turnover period was 0.182 in recorded in the year 2011 while the highest was 0.367 in the year 2014 the findings revealed that

there have been a significant increase in inventory turnover period during the five - year period.

Table 4.3: Average payment period

Years	Number of Woking days	Payables turnover ration	Days
2011	420.926	13.258	32
2012	789.471	29.326	27
2013	885.614	27.269	32
2014	823.487	26.351	31
2015	976.235	28.325	34

Source: Research findings (2016)

From the summary, the year 2012 recorded the lowest value for average payment period at 0.27 days in a year while 2015 recorded the highest value for average payment period at 34 days, the findings revealed a significant increase in payment period during the five year period.

Table 4.4: Cash conversion

Years	Median	Minimum	Maximum	Mean	Std deviation
2011	23	20	27	24	.21
2012	34	30	39	35	.26
2013	53	48	66	57	.34
2014	65	54	74	68	74
2015	71	67	78	74	.44

Source: Research findings (2016)

From the summary the year 2015 recorded the highest value for cash conversion at 74 days a year while 2011 recorded the highest value for firm cash conversation at 24 days, in addition, values for stardard deviation depicts variability in value for firm cash conversion during the five year period with the highest deviation of 0.74 in the year 2014 and the lowest at 0.21 in the year 2011, the findings revealed a significant inecrease in cash conversion during the five year period.

Table 4.5: Current ratio

Years	**Median**	**Minimum**	**Maximum**	**Mean**	**Std deviation**
2011	1.21	1.42	1.924	1.11	.25
2012	1.23	1.32	1.924	1.13	.36
2013	2.31	2.12	2.924	2.18	.21
2014	1.21	2.01	2.924	2.12	.62
2015	2.311	2.08	1.924	3.10	.31

Source: Research findings (2016)

From the summary, the year 2015 recorded the highest value for firm current ratio at 3.1 while 2011 recorded the highest value for firm current ratio at 1.11, in addition, values for stardard deviation depicts variability in value for firm current ratio during the five year period with the highest deviation of 0.62 in the year 2014 and the lowest at 0.25 in the year 2011, the findings revealed a significant inecrease in firm le current ratio during the five year period. impliying that most of the firms were in a positon to meet oprationsl expenses comforatble.

Table 4.6: Leverage

Years	**Median**	**Minimum**	**Maximum**	**Mean**	**Std deviation**
2011	.723	.564	.762	.739	.021
2012	.430	.402	.541	.436	.061
2013	.596	.413	.715	.623	.023
2014	.339	.232	.480	.431	.041
2015	.190	.189	.321	.212	.001

Source: Research findings (2016)

From the summary, the year 2015 recorded the lowest value for firm leverage ratio at 0.212 while 2011 the year recorded the highest value for firm leverage ratio at 0.739, in addition, values for stardard deviation depicts variability in value for firm leverage ratio during the five year period with the highest deviation of 0.061 in the year 2012 and the lowest at 0.001 in the year 2015, the findings revealed a significant decrease in firm leverage ratio during the five year period.

Table 4.7: Firms' Asset Quality

Years	Total investment (000)	Total assets (000)	Net Asset Qualities
2011	5,569,879	36,567	0.0066
2012	7,190,985	32,468	0.0085
2013	8,330,465	57,632	0.0309
2014	10,578,567	50,859	0.0143
2015	10,970,882	58,312	0.0040

Source: Research findings (2016)

From the results, the lowest net value for asset qualities was 0.0066 in the year 2011 while the highest was 0.0409 in 2015 the findings revealed that there have been a significant increase in asset quality during the five -year period

Table 4.8: Size of the firm

Years	Median	Minimum	Maximum	Mean	Std deviation
2011	.0447	.0563	.0581	.0543	.074
2012	.0631	.0593	.0712	.0631	.122
2013	.0726	.0737	.0846	.0769	.267
2014	.0811	.08014	.0859	.0848	.326
2015	.0853	.0863	.0868	.0857	.118

Source: Research findings (2016)

From the summary, the year 2012 recorded the lowest value for firm size at 0.543 while the year 2015 recorded the highest value for firm size at 0.0857, in addition, values for stardard deviation depicts variability in value for firm size during the five year period with the highest deviation of 0. 326 in the year 2014 and the lowest at 0.074 in the year 2011, the findings revealed a significant increase in firm size during the five year period.

4.3 Inferential Statistics

4.3.1 Regression Analysis

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences

(SPSS V 21.0) to code, enter and compute the measurements of the multiple regressions. The model summary are presented in the table below

Table 4.9: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.866	0.750	.712	.1376

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the above table the value of adjusted R squared was 0.712 an indication that there was variation of 71.2 percent on financial performance of firms listed in NSE a due to changes in average collection period, inventory turnover period, average payment period, cash conversion, current ratio, asset quality, leverage, firm size at 95 percent confidence interval. This shows that 31.2 percent changes in financial performance of firms listed in NSE could be accounted to average collection period, inventory turnover period, average payment period, cash conversion, current ratio, asset quality, leverage and firm size. R is the correlation coefficient which shows the relationship between the study variables. From the findings shown in the table above it is notable that there extists positive relationship between the study variables as shown by 0.563

Table 4.10: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	131.688	8	16.461	5.221	.001[b]
	Residual	3.153	1	3.153		
	Total	134.841	9			

Critical value = 2.40

From the ANOVA statistics, the study established the regression model had a significance level of 0.1% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was

less than 5%. The calculated value was greater than the critical value (5221> 2.40) an indication that average collection period, inventory turnover period, average payment period, cash conversion, current ratio, asset quality, leverage , firm size , all affect financial the performance of firms listed in NSE. The significance value was less than 0.05 indicating that the model was significant.

Table 4.11: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.508	.131		- 3.878	.000
	Average collection period	.381	.078	.203	4.885	.001
	Inventory turnover period	-.217	.047	-.207	-4.617	.004
	Average payment period	.116	.025	.096	4.640	.002
	Cash conversion	.201	.044	.196	4.568	.000
	Current ratio	.267	.055	.225	4.855	.009
	Asset quality	.461	.098	.426	4.704	.003
	Leverage	.014	.003	.011	4.667	.001
	Size of the Firm	.486	.104	.454	4.673	.005

From the data in the above table the established regression equation was

$$\mathbf{Y = 0.508 + 0.381X_1 +(-0.217\ X_{2)} + - 0.116\ X_3 + 0.201\ X_4 + 0.267X_5 + 0.461\ X_6 + 0.014\ X_7 + 0.486\ X_{8+}\ e}$$

From the above regression equation, it was revealed that holding average collection period, inventory turnover period, average payment period, cash conversion, current ratio, asset quality, leverage , firm size, the financial performance of firms listed in NSE would be at 0.508, the study further established that a unit increase in average collection period would lead to an increase financial performance of firms listed in NSE by a factors of 0.381, a unit increase in inventory turnover period would change the financial performance of firms listed in NSE by factor of (-0.217), a unit increase in average payment period would change financial performance of firms

listed in NSE by a factor of 0.116, a unit increase in cash conversion would change financial performance of firms listed in NSE by a factor of 0.201, a unit increase in current ratio would change financial performance of firms listed in NSE by a factor of 0.267, a unit increase in asset quality would change financial performance of firms listed in NSE by a factor of 0.461 a unit increase in leverage would change in financial performance of firms listed in NSE by a factor of 0.014 and that a unit increase in firm size would lead to a positive change in financial performance of firms listed in NSE by a factor of 0.486

4.4 Discussion of the Findings

4.4.1 Average Collection Period

Results obtained from the correlation results show that a unit change in average collection period would positively change the profitability among manufacturing firms by a factor of 0.381, the study also revealed that improved liquidity will enable the firm to meet its financial obligations as and when they fall due and also be in a position to seize opportunities that may arise in the market. The findings are in line with the research by Raheman & Nasr, (2007) who established that a credit collection policy that facilitates low average collection period will ensure the firms" healthy cash flows and improved liquidity position.

Results obtained from descriptive analysis show that effective management of receivables leads to increase in firm size, realized through increased turnover which had at the same time the effect of improving the realization of funds from the cycle leading high gains by the firm. Firms listed in NSE should improve their management of working capital cycle by limiting the average collection period and

increasing payment period so that the firm will have an opportunity for short term source of funds, and make the payment when its due.

4.4.2 Effect of Inventory turnover period on firms profitability

Results obtained from the regression analysis show that a unit rise in stock turnover period would change the financial performance of firms listed in NSE by factor of (-0.217) this mean that untimely inventory turnover has a negative insignificant relationship with both ROA. Which is completely against the common view of high turnover will increase the net gain of the firm, (Marijan et.al 2013). The results contradicts with those of Kolias, Dimeli and Vasiolis (2010) who reported that inventory turnover has a positive relation with profitability. Therefore, with this inference, firms that report high gross profit margins are believed to have higher inventory turnover though the relationship is statistically insignificant.

The research also established that systematic and organized management of stock will improve the firm performance and profitability thus increasing the firm useful life. Improved coordination and control of the firms stock will help the organization reduce unnecessary cost that would have reduced its revenues and at the same will improve over stocking and stock outs thus contributing overall efficiency of the firm. The findings are in support of the research by Gupta & Gupta, 2012 that timely inventory management improves firms overall performance and profitability challenging firms to develop proper management plans for their inventories.

4.4.3 Average payment period

Results obtained from the regression results show that a unit change in average payment period would positively change the profitability among manufacturing firms listed in NSE by a factor of 0.116. Further the study noted when we postponed payment that we would have to suppliers and other service providers till its due date will give the firm an opportunity to access short term funds that is in expensive. The danger side is when the firm fails to meet its obligation as expected time. The firm will forgo an opportunity cost if it's offered an early payment discount but should the necessary decisions to weigh the different options. The findings are in support of the research by Mathuva (2010) on the existence of positive relationship among the profitability of the firm and average payment period.

Results from the descriptive statistics show that account payables is an important source of short term funds for organization, the delayed payment funds will be utilized for short term investment thereby deriving gains for the organization. To keep good effective relationship with suppliers the firm should honor its liabilities when they become due. Firms listed in NSE in should postponement their suppliers to future period which acceptable to the suppliers as source of funds, without affecting the relationship between the firms. The results concur with the research by Mathuva (2010) who showed positive relations between profitability and average payment period.

4.4.4 Cash conversion

Results obtained from the regression results show that a unit change in cash conversion would positively change the profitability among manufacturing firms by a factor of 0.201 which implies that if there are increase in cash conversion rotation

equally there will be increase in profitability. The positive association among profits and cash conversion cycle might be explained by the type of businesses and advanced profitability due to market dominance The findings contradicts the research by Chatterjee (2010), who established a negative and important association amongst the length of the cash conversion rotation and the business success.

Results obtained from descriptive analysis displayed that the nominated businesses are having low average return on asset and return on equity with significantly negative cash conversion cycle. Regression results showed that cash conversion cycle has a significantly positive association with both return on assets and equity indicating that it is not essential that always there must be smaller the cash conversion cycle larger would be the profitability measured through return on assets and equity the findings are in support of the research by Padachi (2006) who found that if the firm is invested higher in the inventories then the optimum level will diminish and profit will go down , the findings reaffirms the literature by Hutchison et al. (2007) who observed significant association of cash conversion cycle with the return on investments of the companies

4.4.5 Current ratio

Prediction results obtained from the regression model showed that a unit rise in current percentage would increase financial success of firms registered in NSE (Beta coefficient value = 0.267) the findings concur with the study by Hempel *et al*, (2014) who found a positive association amongst optimal level of current ratio and financial performance of merged or acquired Insurance firms.

Descriptive results showed that current ratio gives a sense of the competence of a business's working cycle or its ability to turn its product into cash. Firms listed in

NSE that have trouble getting paid on their receivables or have long inventory turnover can run into liquidity problems because they are unable to alleviate their obligations, If the current assets of firms listed in NSE are twice more the current liabilities, then that business would precisely better performance and ability to settle its obligation when they are to pay. Whereas if current liabilities surpass current assets, then the company may have problems meeting its short-term responsibilities. The findings are in support of the research by Kumar (2009) that current ratio is a test of quantity, therefore should not be used as a test for quality, current ratio is not an exact science to test liquidity of a company because the quality of each individual asset is not taken into account while computing this ratio, current ratio should be used in conjunction with other ratios like inventory turnover ratio, debt to equity ratio and quick ratio etc to provide precise quality of current assets and a better idea of solvency

4.4.6 Asset quality

Results obtained from the correlation results show that a unit change in asset quality would positively change the profitability among manufacturing firms Listed in NSE (Beta coefficient value = 0.461) The study also revealed that the quality of assets is an important parameter to gauge the strength of a firm and deterioration of asset quality not only affects the financial and Operating performance of firms listed in NSE but also further affects the national economic system. The findings are in line with the research by Shin & Soenen, (2011) who established that the way organize and organize assets can have a substantial influence on both the liquidity and success of the business (Shin & Soenen, 2011). Descriptive results further showed that Poor asset quality and low levels of liquidity are the two major causes of failure among manufacturing firms listed in NSE.

4.4.7 Leverage

Results obtained from the correlation results show that a unit change in firms leverage would positively change the profitability among manufacturing firms listed in NSE (Beta coefficient value = 0.014) The findings are in support of the research by Bao (2010) who found a negative association between high leverage and investment in Chinese registered firms and again, the association is stronger for firms characterized by low growth opportunities, or low Q firms.

Descriptive results showed that too much debt can be dangerous for a Firms listed in NSE and its investors. Uncontrolled debt levels can lead to credit downgrades or worse. When the debt ratio is low, principal and interest payments don't command such a large portion of the firm's cash flow and the both firms is not as sensitive to variations in business or interest rates from this perspective. Low debt ratio may also show that the both companies have a chance to use leverage as a means of sensibly growing the business. In overall, a high debt-to-equity ratio shows that a firm may not be able to make sufficient cash to content its debt responsibilities. However, low debt-to-equity ratios may also specify that a firm is not taking advantage of the improved profits that financial leverage may bring. The findings are in support of the research by Lau et al. (2008) that a unwillingness or incapacity to borrow may be a symbol that operating limits are merely too constricted.

4.4.8 Size of the firm

Results obtained from the correlation results show that a unit change in firms size would positively change the profitability among manufacturing firms (beta coefficient value = 0.486) The study also revealed that company scope plays an significant role in explaining profitability and that larger businesses are more

competitive than minor businesses in harnessing economies of scale in dealings and enjoy a greater level of profits. The findings are in support of the research by Almajali et al (2012) that the scope of the businesses can influence its economic performance.

Results obtained from descriptive analysis show that extent of a company contributes a significant role in defining the kind of association the business enjoys within and external its functioning setting, the bigger a businesses has superior effect on its shareholders. Bigger businesses have some benefits such as a better opportunity of taking advantage of scale of economies which can allow additional cost saving in terms of reduced production costs, a better negotiating influence over both dealers and wholesalers or clients. the findings are in line with the research by Ravenscraft and Scherer, (2007) who established that bigger businesses are more stable and established and they can create bigger sales since they have greater production volume that will enhanced reduction of unit cost per production thereby able to sell more units than smaller businesses.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter brings summary of the research findings, conclusion and recommendations. The objective of this inquiry was to bring forth the outcome of working capital management and asset quality in terms of firm profitability among manufacturing firms listed in NSE.

5.2 Summary

Results obtained from the correlation results show that a unit change in average collection Period would positively change the profitability among manufacturing companies by a factor of 0.381, The inquiry also discloses that Improved liquidity will enable the company to fulfill its financial obligations at the time when its due and also to be in a position to seize opportunities that may arise in the market. The findings concur with the research by Raheman & Nasr, (2007) who established that a credit collection policy that facilitates low average collection period will ensure the firms‟ healthy cash flows and improved liquidity position. Results obtained from descriptive analysis show that systematic organization and coordination of receivables helps to improve the level of the firms' activities allowing the firm increase its sales level as a resulting in smooth recycling of funds and increased profitability. Firms listed in NSE should keep their average collection period lower than average payment period so as to reduce investment in receivables at the same time to be position to make as and when it its due. The findings are in line with the research by Falope and Ajilore (2009) who established a high important negative association amongst the ACP and Profitability.

Results obtained from the regression analysis show that a unit rise in inventory turnover period can change the financial performance of firms listed in NSE by factor of (-0.217) this mean that untimely inventory turnover has a negative unimportant association with both ROA. This is consistent with the view that, if the gross profit rate is low, a high volume of trading transactions is necessary to produce a satisfactory amount of total profits, (Marijan et.al 2013). This finding contradicts with those of Kolias, Dimeli and Vasiolis (2010) who reported that inventory turnover has a positive relation with profitability. Therefore, with this inference, firms that report high gross profit margins are believed to have higher inventory turnover though the relationship is statistically insignificant. The study recognized that proper control and organization of inventories will ensures business success and continuity which one of the objectives of business enterprise. A well-organized inventories will result in operational efficiency which will reduce unnecessary overstocking or obsolescence in the inventories; this will intern reduce the operation costs leading to successful turnaround for the organization. The findings are in support of the research by Gupta & Gupta, 2012 that timely inventory management has a substantial effect on the profitability of an entity thus stock management should be a part of the overall strategic business plan in every organization.

Results obtained from the regression results show that a unit change in average payment period would positively change the profitability among manufacturing firms listed in NSE by a factor of 0.116. Further the study noted that postponing payment of accounts payable to dealers lets businesses to access inexpensive short term funding that can be invested in short term investments and making payment promptly

when its due. On the other hand, this will attaract opportunity cost if discounts is offered for early payments. The firm should reach decision on how to balance between the two mutually exclusive decisions. The findings are in support of the research by Mathuva (2010) that there occurs a positive association amongst average payment period and profitability Results from the descriptive statistics show that account payables plays a serious role in managing working capital since postponing bill payments is one of the techniques managers use to have access to an simple source of funding. Though, the opportunity cost of keeping high account payables may upset the business if discount for early is offered; Firms listed in NSE in should strive to make payments to suppliers as agreed without delaying since any delay will have impact on their sustainability and existence of the firm. The findings are in line with the research by Mathuva (2010) who shows that average payment period has a positive relationship with profitability

Results obtained from the regression results show that a unit change in cash conversion would positively change the profitability among manufacturing firms (Beta coefficient value = 0.201) Implying that when the cash conversion cycle increases the profitability also increases. The positive relationship between profits and cash conversion cycle could be explained by the nature of firms and higher profitability due to market dominance The findings contradicts the research by Chatterjee (2010), who established a negative and significant relationship between the width of the cash conversion cycle and the corporate profitability. Results obtained from descriptive analysis showed that the selected companies are having low average return on asset and return on equity with significantly negative cash conversion cycle. Regression results showed that cash conversion cycle has a

significantly positive association with both return on assets and equity indicating that it is not necessary that always there must be lesser the cash conversion cycle greater would be the profitability measured through return on assets and equity the findings are in support of the research by Padachi (2006) who found that if the firm is invested higher in the inventories then the optimum level will diminish and profit will go down , the findings reaffirms the literature by Hutchison et al. (2007) who observed significant association of cash conversion cycle with the return on investments of the companies

Prediction results obtained from the regression model showed that a unit increase in current ratio would increase financial performance of firms listed in NSE (Beta coefficient value = 0.267) the findings concur with the study by Hempel *et al,* (2014) who establish a positive relationship between optimal level of current ratio and financial performance of merged or acquired Insurance firms. Descriptive results showed that current ratio gives a sense of the efficiency of a company's operating cycle or its ability to turn its product into cash. Firms listed in NSE that have trouble getting paid on their receivables or have long inventory turnover can run into liquidity problems because they are unable to alleviate their obligations. If the current assets of firms listed in NSE are twice more the current liabilities, then that company would have good short-term financial strength whereas if current liabilities exceed current assets, then the company may have problems meeting its short-term obligations. The findings are in support of the research by Kumar (2009) that current ratio is a test of quantity, therefore should not be used as a test for quality, current ratio is not an exact science to test liquidity of a company because the quality of each individual asset is not taken into account while computing this ratio, current ratio

should be used in conjunction with other ratios like inventory turnover ratio, debt to equity ratio and quick ratio etc to provide precise quality of current assets and a better idea of solvency

Results obtained from the correlation results show that a unit change in asset quality would positively change the profitability among manufacturing firms Listed in NSE (Beta coefficient value = 0.461) The study also revealed the quality of assets is an important parameter to gauge the strength of a firm and deterioration of asset quality not only affects the financial and Operating performance of firms listed in NSE but also further impinges on the soundness of the national economic system. The findings are in line with the research by Shin & Soenen, (2011) who established that The way of managing assets can have a significant impact on both the liquidity and profitability of the company (Shin & Soenen, 2011). Descriptive results further showed that Poor asset quality and low levels of liquidity are the two major causes of failure among manufacturing firms listed in NSE, The evaluation of asset quality should consider the adequacy of the Allowance for credit Losses and weigh the exposure to the borrower default under actual or implied contractual agreements.

Results obtained from the correlation results show that a unit change in firms leverage would positively change the profitability among manufacturing firms listed in NSE (Beta coefficient value = 0.014) The findings are in support of the research by Bao (2010) who found a negative relationship between high leverage and investment in Chinese listed companies and again, the relationship is stronger for firms characterized by low growth opportunities, or low Q firms. Descriptive results showed that too much debt can be dangerous for a Firms listed in NSE and its investors. Uncontrolled debt levels can lead to credit downgrades or worse. When the

debt ratio is low, principal and interest payments don't command such a large portion of the company's cash flow and the both firms is not as sensitive to changes in business or interest rates from this perspective. Low debt ratio may also indicate that the both firms have an opportunity to use leverage as a means of responsibly growing the business. In general, a high debt-to-equity ratio indicates that a company may not be able to generate enough cash to satisfy its debt obligations. However, low debt-to-equity ratios may also indicate that a company is not taking advantage of the increased profits that financial leverage may bring. The findings are in support of the research by Lau et al. (2008) that a reluctance or inability to borrow may be a sign that operating margins are simply too tight.

Results obtained from the correlation results show that a unit change in firms size would positively change the profitability among manufacturing firms (beta coefficient value = 0.486) The study also revealed that business scope contributes significant role in clarifying the successful and that superior companies are more modest than minor or small companies in utilizing the window of opportunity provided by economies of scale translating to large transactions and a greater level of gains. The findings are in support of the research by Almajali et al (2012) that the size of the firm can affect its financial performance. Results obtained from descriptive analysis show that size of a firm plays an important role in determining the kind of relationship the firm enjoys within and outside its operating environment, The larger a firm is, the greater the influence it has on its stakeholders. Larger firms have some advantages such as a greater possibility of taking advantage of scale of economies which can enable more efficient production, a greater bargaining power over both suppliers and distributors or clients, exploiting experience curve effects

and setting prices above the competitive level the findings are in line with the research by Ravenscraft and Scherer, (2007) who recognized that bigger companies are extra steady and developed and they can create better sales since they have bigger production volume that will enriched capital cost reserves with the economies of scale.

5.3 Conclusions

The study concludes that credit collection policy that facilitates low average collection period will ensure the firms' healthy cash flows and improved liquidity position and that improved liquidity will enable the companies to honour its financial obligations when the agreed time comes for the payment to be made and also be in a position to seize opportunities that may arise in the market.

The study concludes that increase in inventory turnover period promotes the financial performance of firms listed in NSE, and that proper and systematic management of stock will safeguard and increase chances of business survival and higher prospects of excess revenue.

The study concludes that account payables covers an important part in the management of working capital since postponement of due bills to a future period is one tools that is utilized by managers as a source short term funding; while at the same time this may prove to remain costly if the firm is access premature payment discount while considering the opportunity cost attached to it.

The study concludes unit change in money transformation sequence would positively change the success among manufacturing firms, implying that increase in

cash conversion cycle has positive impact on the profitability of the company; meaning that there are positive relationship with both equity and asset.

The study concludes current ratio explains the ability of the firm to manage effectively the operating cycle, so as minimize instance of liquidity shortfall or its strength to convert its output into ready cash, financial managers should capable ensuring that the firms' current assets can readily offset the liabilities when the need arises.

The study concludes that how we manage the assets of the company can have a notable change on the economic fitness of the firm in relations to liquidity and productivity. Value of assets is an important benchmark when it comes to the ability of the company and decline of asset quality will have serious impact on both operating and financial performance of the companies.

The study concludes that less debt ratio portrays the ability of the company to utilize leverage as a way of reaching its intended growth level. On the other hand large debt-to-equity percentage reveals that the firm will not be position to borrow the required cash due to its current debt level. The research also concludes that less debt-to-equity level might signal that the firm is not utilizing the opportunity that comes with the financial leverage in terms of the increased profits.

The study concludes that big companies enjoy a superior position in terms of economies of scale that will give them an upper hand in terms of bargaining power and cost reduction.

5.4 Recommendations

Firms Listed in NSE must generate a credit collection policy with clear guidelines on the procedures and practices adopted by the business to gather late or delinquent accounts receivable. This policy must allow for simultaneous use of a combination of several collection strategies that ensures that the firm not only improves its cash flow by shortened average collection period but also does not suffer bad debt losses

Firms listed in Nairobi Securities exchange should maintain leverage ratio at a standard level. This is based on revelation that excessive obligation can be risky for businesses and its shareholders as unrestrained obligation heights can lead to credit downgrades while at the same time small debt-to-equity percentage might show that a firm is not utilizing the opportunity of the upward profits which financial leverage comes with.

For asset quality, Firms listed in NSE need to improve their processes of screening debt management .This remains significant pointer since manufacturing firms have had severe problem with bad debts in the previous which led to failure of numerous manufacturing firms. On the other hand manufacturing firms ought emphasis on refining their investment levels in order to progress their financial success. This will permit the manufacturing firms not only to be mitigated against exogenous tremors, nevertheless also to take complete benefit of corporate openings as they originate and grow their financial performance in the course.

Manufacturing firms listed in NSE need to keep a track on the asset quality. This will help the company to measure how productive the business is and how much revenue is generated from its investment in the assets. Therefore companies need to analyze and improve their asset quality at regular intervals.

5.5 Limitation of the study

The research focused on companies which were continuously quoted at Nairobi Securities Exchange in the year 2011to 2015 for a period of five year. However the target population size of the study is small considering the total number of registered limited liability companies in Kenya and hence the finding can't be generalized as true of all companies in Kenya. The period covered was also shorter and a longer period of more than five year is necessary.

Secondary data is utilized for the findings which is tracked from audited financial statements of the businesses experimented. The financial statement was organized in agreement with the commonly acknowledged accounting principles and global financial reporting standard however there is a possibility of use of different accounting policies such as depreciation rate resulting into different outcome.

The research population included companies from all sectors of the economies and hence different operating environment. The study could be undertaken among companies operating in the same sector of the economy.

5.6 Recommendations for Further Research

The study observed at the outcome of working capital organization and asset quality on firms profits among manufacturing companies registered in NSE. Additional studies may focus on the link among board characteristics and financial results of companies listed at NSE.

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APPENDICES

Appendix I: Manufacturing firms listed in the NSE

1. B.O.C Kenya Ltd
2. British American Tobacco Kenya Ltd
3. Carbacid Investments Ltd
4. East African Breweries Ltd
5. Mumias Sugar Co. Ltd
6. Unga Group Ltd Ord
7. Eveready East Africa Ltd Ord
8. Kenya Orchards Ltd
9. A.Baumann Co Ltd
10. Flame Tree Group Holdings Ltd

Source: Nairobi security exchange website - https://www.nse.co.ke/listed-companies/list.html