EFFECT OF WORKING CAPITAL MANAGEMENT ON THE FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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DECLARATION

This research project is my original work and has not been presented for any partial fulfillment of award of degree in any other institution

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This research project has been submitted to the School of Business, The University of Nairobi, with approval from the University supervisor.

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DEDICATION

I dedicate this entire project to my parents and siblings for their encouragement and inspiring wisdom that enabled me to pursue this course. Indeed, their support was invigorating with the spirit to aim higher and higher.

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ABBREVIATIONS AND ACRONYMS

CA	Current Assets
CCC	Cash Conversion Cycle
CL	Current Liabilities
CMA	Capital Markets Authority
DIO	Days Inventory Outstanding
DPO	Days Payables Outstanding
DSO	Days Sales Outstanding
GFC	Global Financial Crisis
MF	Manufacturing Firms
NSE	Nairobi Securities Exchange
ROA	Return on Investment
ROCE	Return on Capital Employed
ROE	Return on Equity
SME	Small and medium size enterprises
SPSS	Statistical Package for Social Sciences
WC	Working Capital
WCM	Working Capital Management

ABSTRACT

The analysis of working capital is very crucial as it includes policies relative to liquidity management. Working capital informs or rather signals the organization on the liquidity needed for the smooth flow of operations in a company. When payables are due before collectables or rather the receivables, then there would exist a situation of illiquidity in the organization. Payments may have to be suspended in extreme cases and this would lead the firm to financial distress. Cash is of great value to firms which are constrained financially than those which are unrestrained, less valuable to mismanaged organizations than those which experience good governance. The cash conversion cycleserves as an applicable analysis tool which establishes how and why the firm needs more cash to operate.Manufacturing firms based on their nature, require to invest in a substantial amount of fixed assets and working capital. Recently, several manufacturing companies in the sector have fallen down into statutory ownership, due to unsuitable strategies of monetary management, viewed as the chief reason of bad fiscal performance.The aim of this study was to investigate the effect of working capital management on the financial performance of manufacturing firms listed at the Nairobi Securities Exchange in Kenya.This study was anchored on the Agency Theory, the Keynesian Demand Theory for Money and the Cash Conversion Cycle theory. The research employed the use of descriptive design. This research was a census of all manufacturing firms listed at the NSE in the years 2014 to 2018. A census survey of these companies was undertaken since the population was relatively small. Secondary data was utilized whereby audited accounting statements for the manufacturing firms between the periods of 2014 to 2018 were analyzed. SPSS version 21 was used to analyze the secondary data collected. Descriptive statistics was done in order to know normality of the data distribution. Skewness and kurtosis results confirmed that variance was within the limits. Inferential statistics was used to study the study variables and to test the research model adopted in this study. Correlation results indicated existence of a positive correlation between days inventory outstanding, cash conversion cycle, firm size and return on assets. Negative correlation was shown between days sales outstanding, current ratio, leverage and return on assets. F-Test under regression analysis showed that all results were significant with a p-value of 0.00 at 95%.The study concluded that there is a positive relationship between working capital management and performance. Among the recommendations is that in order for manufacturing firms to survive during these harsh economic times, financial managers need to come to speed and apply their working capital skills effectively. This would ensure that the debt collection team is at their work so as to maximize on revenue collection to ensure smooth running of the organization. A ready market for the firm's products needs to be established as well, to allow for circulation of money or prevent cash being held in stock for longer periods. The managers also need to ensure that their creditors are paid promptly to avoid bad publicity. The study suggested that further research be conducted on working capital however on other sectors other than the manufacturing sector.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Yunos (2015) states that wherecurrent assets (CA) and current liabilities (CL) are efficiently administered, profit maximization is achieved while ensuring that firms avoid liquidity problems. Current and non-current asset management is very necessary for all organizations in order to sustain their growth. Working capital (WC) measures operating liquidity and any inefficient handling of it could lead to deterioration of the strength of a firm.WC in simple terms could refer to the money available to fund an organization's daily operations. It could also be defined as CA less CL. CA include debtors, cash, and inventory (raw materials & finished goods), whileCL comprise of the company's short-term obligations to be met within 12 months; which are mainly referred to as the accounts payables. Afrifa (2016) posits that CA and current liability management provides vital support for revenues. Financial performance (FP) revolves around utilization of a firms assets to create revenue. FP can be defined as the success of a firm which is expressed in money terms. It is concerned with how the company is doing in generation of money value from its business. FP can be viewed as the generation of rewards to the business from its operations and investment activities.

The agency theory, the Keynesian demand theory for money and the cash conversion cycle(CCC) theory were the theories on which this study was based on. Meckling and Jensen (1976) agency theory stipulates the segregation of ownership of a company between the shareholders and managers. Occasions may arise where management may place their interests before those of the shareholders to satisfy their own selfish gains. The

Keynes(1936) Theory of Demand for Money gives reasons why individuals or organizations hold money. The reasons are mainly three as will be discussed further in this research i.e., for precautionary motive, for transactions motive and finally for the speculative motive.Gitman (1974) developed the Cash Conversion Cycle theory, which explains how fast or slow inventory is converted into cash. A longer CCC would result into a longer outlay and recovery of cash, while a shorter cycle indicates an aggressive working capital policy.

Working capital control decisions are generallyquite relevant to manufacturing organizations. Majority of the manufacturing entities have their CA exceeding the fixed assets, in most cases accounting to over a half of their total assets. Manufacturing is basically the process of producing products or finished goods for consumption or commercial purposes using labor, machines, tools, chemicals among others. This studyfocused on the nine NSE-listed firms in manufacturing industry.These firms compared to Small and Medium Sized enterpriseare required to maintain larger amounts of inventory and accounts receivables since WCmatters are more vital to them. Every firm in the manufacturing industry has a different production cycle which determines the amount of WC required by the business entity in order to produce the final product.In this regard an automobile manufacturing firm would require more WCunlike a firm manufacturing detergents due to the differences in the time period experienced in obtaining the final product. Without adequate WC, manufacturing operations would stop as itentails a chain of activities which if discontinued would mean that the whole process would stop. Hence, there is need for the finance managers to be very vigilant on their WC status as it determines organization success.

1.1.1Working Capital Management

Jamalinesari and Soheili (2015) posit that, short-term decisions affect liquidity of firms, more so when dealing with WC that dwells on the composition of CL and assets. The sustainability of many businesses all over the world is threatenedddueto the current strain on cash and credit.WCplanning is aimed at ensuring that entities settle their short-term commitments as soon asthey arise. This aspect facilitates the continuity of a business with sufficient cash flow. Consequently, it ensures that decisions regarding accounts payables and receivables are made promptly, maintaining reasonable levels of stock while ensuring investment of accessible cash.

Padachi and Howorth (2014) indicated that, whenWC is handled effectively, the firm is prevented from suffering of financial distress, solvency is maintained and the firm is rest assured of its long-term survival. On the existence of lower levels of CA, it's expected that there would be a shortfall on the liquidity levels, stock outs would also be experienced leading to difficulties in ensuring smooth flow of operations. WhenCA are in excess, it is normal to experienceadverse effects on a firm's profitability. Over investment as an indicator of poor WCmonitoring is also influential on value destruction. Hence, shareholders' wealth creation mainly relies on adequate control of WCby organizations. It is realized that monitoring of the level of liquidity in a firm from time to time is a crucial matter that requires consideration.

The control of WC entails finding the appropriate level of CA and CL. This process is very necessary for organizations since it affects profitability and risk. Its main aim is keeping in check thatWCcomponents are inan optimal balance. The executives' capacity to effectively manage payables, receivables and inventory determines the success of an entity. Finance

managers spend most of their time trying to achievea healthy level of thesecomponents, with the spirit of ensuring aproper balance between efficiency and risk is maintained; which results into smooth operations of businesses. The process requires constant monitoring of cash, inventory, receivables and payables. Organizations could increase their availablefinances to expand projects by reducing the volume of investment locked up in CA(Tauringana & Afrifa, 2013).

In working capital management (WCM), the stock levels have to be adequately planned for. In this regard for the MF, the level of stocks should be adequate. Having too much inventory at hand leads to more inventory costs which may impede on profitability levels in the company. However, having too little inventory may lead to shortage costs as there may be inadequate inventory at hand when the company needs them. For instance, if there is a breakdown of supply of raw materials, the demands of final consumers will not be met. This means that the demand for firm's products exceed supply. Hence, the financial manager needs to ensure that there is optimum level of inventory turnover and consequently fewer days required to sell the company's products. This is achieved when the financial manager adequately understands the dynamics of the business environment.

Another essential element in WCM is cash, both at hand and in the bank. The key principle is that the financial managers should ensure that there is no too much cash that is just idle in the business. Instead, the managers should look for profitable short-term investments that can generate extra returns. Such opportunities include buying treasury bills issued by the government. The idea is that holding too much cash results in opportunity costs, expressed as the profits foregone if the idle cash was invested somewhere else. It is important that the manager considers uncertainty in cash flows in the business environment

and look for the appropriate avenue to channel idle business cash so as to generate revenues. There should be an adequate amount of cash to run operations but to minimize costs of holding cash. This is because cash on its own in business does not generate returns that are adequate.

In WCM, it is also very critical that debtors and creditors are adequately controlled. The basic idea is that for debtors or accounts receivables, there should be mechanisms set to ensure that they don't hold onto business cash for long after sales have been made to them on credit. In the case of creditors or accounts payable, structures should be set in business operations to ensure that the funds for creditors stays as long as possible. This means that the manager retains external cash for long so as to maximize its use. The idea is that the debts should not be paid earlier than as required because the financiers of the business will be benefiting at the expense of the business. In summary, collection of funds from debtors should be accelerated while payments to creditors should be delayed.

The practice of WCM is therefore essential in determining the profitability of the business from its operations. This is because it determines the sales that will be made as well as the costs that will be incurred in the process. One cannot carry out business successfully if there is inadequate cash to run operations. For instance, one should ensure that operations are not majorly done using short term debts as it might be bad for the credit worthiness of the institution. Therefore, WCM is key for successful carrying out of operations.

1.1.2 Financial Performance

Hamon (2013) stated that, performance determines how best an entity uses assets for revenue generation. Performance can be equated to the general financial health of an entity.

Inthis case, good performance will be achieved at the point whereCAand liabilitiesare maintained at optimal levels. Performance is therefore a gauge of an organization's financial stability overtime, which is essential in the comparison of entities which fall in a similar industry or comparison of these entities among different industries or sectors. Performance is an element which measures the entity competitiveness, andis concerned with shareholder's value in the long run. Love and Rachinsky (2007) pointed out that, capital indicators are used to gauge, report and enhance performance.

De Almeida and Eid (2014) observed that, organizations have a target WC level which makes them most profitable. Performance will be measured usingROA or ROE and liquidity in this study. Liquidity teststhe firms' capability to pay for its short-term debts withinthe required time. It also gauges the organizations' capacityto handle itssudden money needs. Where anorganizationis unable to pay for its obligations as a result of illiquidity, it maylead to bad ratings and creditors mayalso lose confidence in the firm.ROA measures a firm's efficiency in the utilization of resources to create revenue or income. Financial ratios such as the current ratio, creditors days, debtors' days and inventory days will be of great value in gauging performance in this particular study.

The entity's FP can be measured based on various dimensions. From the perspective of financial analyst, FP of an entity can be viewed in relation to profitability, liquidity, gearing level and growth. In terms of profitability, FP can be measured as profitability for sales or investment. In relation to investment, the most commonly used measure is return on investment as it outlines the net profits of the entity at the end of the financial year. It is mostly preferred as it outlines the return to the total assets of the entity. It is also known as ROCE as the capital is usually used to finance the assets of the business. In relation to

sales, the most common measure for profitability is net profit after tax. Liquidity measures of FP such as current ratio give a picture of the ability of the entity to pay its short-term obligations when required to do so. For gearing, a company is said to be doing well when its gearing level is optimal, that is, neither too high nor too low. Generally, gearing is good for company revenue generation but too high gearing increases the financial risk which the company is exposed to. Greater interest payments translate to low net profit after tax also in case of high gearing. Growth can be viewed in terms of the market value of company shares and earnings per share among others.

1.1.3Working Capital Management and Financial Performance

Decisions to do with WC are very key to the success of every business. Jamalinesari and Soheili (2015) observed that, short-term decisions have a relationship with liquidity. They went further to explain that, managing ofWC which entails putting into consideration the composition of an organization's CA and liabilities also has an influence on a firm's liquidity. Many businesses perform poorly due to improper handling of WC. The company is threatened of being insolvent, suffers distress and ends up in bankruptcy. For a firm to remain competitive, measures of managing WCshould beestablished and implementedto prevent such financial risks from occurring. Constant monitoring of the WC components need to be considered as well in ensuring good performance of the firm.

Kwenda and Holden (2014) implied that, revenue expansion is very relevant for WC requirements for every organization. This is because WC levels rely on the volume of sales. Organizations which have growth opportunities are considered to have better investment opportunities therefore will ensure availability of WC to enable them take advantage of these opportunities. Many researchers considered WCM as an item of the balance sheet

which has no impact in increasing shareholder's wealth. A paradigmshift was experienced after the Global Financial Crisis (GFC) which took place between 2007 and 2008.Due to this crisis majority of the big institutions went bankrupt, leading to a credit crunch for corporate organizations. While the GFC was taking place,organizations all over the worldexperienced a drop in the demand of their goods and services, compelling them to rely on internal sources to settle their short-term obligations because of the limited availability of external finance. Kesimli and Gunay (2011) found that organization's which embraced outstanding WCM practices had better performance during the GFC as compared to those that did not apply these practices.

Tingbani, Tauringanaand Afrifa (2016) empirically established that, the success of relatively small firms is more attainable by efficient managing of WC as compared to big firms. WC decisions contribute to an entity's profitability, risk and finally its value. Investment on WC for MF is necessary in funding activities. Effective WCM has to ensure proper WC levels to manage with the unpredictable cash flows. This is only achievable when companies purpose to reach a compromise between liquidity and profitability. Remember profitability is among the measures of performance. In the context of MFwhere stockis inadequate, there would be production disturbances, delays in deliveries, and consequently loss making.

1.1.4 Manufacturing Companies at the Nairobi Securities Exchange

According to the Kenya's budget statement financial year (2019/2020), this sector (manufacturing) is among the four pillars of economic development (the big 4 agenda). Investment in this sector is important in the transformation of the country into a middleincome economy. In supporting manufacturing, the government of Kenya provided

electricity rebates to improve competitiveness. The sector is aimed at creating more job opportunities for the unemployed in the country. The famous Kenya's vision 2030 also features the manufacturing industry. The sectors aims to add to GDPby not less than ten percent per annum. Kenya will enjoy global competitiveness and prosperity if the interventions proposed in the vision are reinforced. Just to mention but a few of the objectives to be reached with this may include; to strengthen the capacity of domestically manufactured goods, to develop niche products for existing and upcoming markets etc.

The re-known African exchange based in Kenya is the Nairobi Securities Exchange (NSE). Its establishment dates way back in 1954 and it offers a facility of trade for both domestic andglobal investors. TheNSE is playing a major duty in enabling Kenya's economy grow through encouraging investments and savings. The CMA is responsible for regulation of Kenya's capital markets.Kenya has nineMF which are listed at the NSE as follows; Unga group Ltd, Flame Tree Group Holdings Ltd, Carbacid Investments Ltd, Kenya orchards Ltd, Eveready East Africa Ltd, B.O.C Kenya Ltd,East Africa Breweries Ltd,British American Tobacco Kenya Ltd and Mumias Sugar Company Ltd.Nevertheless, some of theseMF are having WC issues and poor corporate governance, which have resulted to their poor performance (NSE website, 2019).

1.2 Research Problem

Sirakaya-Turk and Dogru (2017) posit that, cash is of great value to firms which are constrained financially than those which are unrestrained, less valuable to mismanaged organizations than those which experience good governance. The analysis of WC is very crucial as it includes policies relative to liquidity management. WC informs or rather signals the organization on the liquidity needed for the smooth flow of operations in a

company. When payables are due before collectables or rather the receivables, then there would exist a situation of illiquidity in the organization. Payments may have to be suspended in extreme cases and this would lead the firm to financial distress. The cash conversion cycle (CCC) serves as an applicable analysistool which establishes how and why the firm needs more cash to operate. In managing WClevels, thebusiness nature is part of the contributory factors that need to be considered.MF based on their nature, require to invest in a substantial amount of fixed assets and WC. Retail stores on the other hand will be required to hold large volumes of inventoryin line with preferences and demands of their customers.Recently, several manufacturing companies in the sector have fallen down into statutory ownership, due to unsuitable strategies of monetary management, viewed as the chief reason of bad fiscal performance.

Empirical evidences show that, the backbone of an efficiently managed organization is WCM. Internationally, Tauringana and Afrifa (2013) noted that WCMlinearly relates with profitability. Banos-caballero (2012) determined that WCM and profitability are non-linearly related and also established that having little WC can interrupt sales and this result in inadequate revenues which translates to low profitability.It is evident that, the two studies are similar but with two different findings, hence the need to conduct more studies on the same.

Nyarangi (2016) established that WCM and NSE firm performance are strongly related.Both CCC and ACP were found to be negatively related with ROA.Despite ICP and APP being statistically insignificant,ICP and APP were negatively and positively related with ROA respectively. Chemis (2015) determined that WC and profitability are negatively and significantly related. Due to the differences in findings of previous studies,

a great motivation to conduct this study came up. Most importantly was to find a solution to thequestion-what are the effects of WC management on the financial performance of MF listed at the NSE?

1.3 Research Objective

To determine the effect of WC management on the financial performance of MF listed at the NSE.

1.4Value of the Study

This study will be valuable to a number of stakeholders. To managers of MF, the study would guide them in policy formulation and decision making relating to WC in their firms. The managers would be in the fore front to ensure that the cash flow levels are up to date for the stability and continuity of their businesses. The study would also take care of entities by ensuring that they settle their short term obligations as soon as possible. This will contribute in enhancing investor confidence on the creditworthiness of the firm.

To investors, the study would increase their knowledge as regards to the liquidity position of these MF. Suppliers of raw materials, tools and equipment among others would be very cautious to offer their products on credit. This would be after a serious observation on the cash flow patterns of these firms. No business person would prefer making losses over profits. Therefore, such suppliers would shun away from supplying to such companies, due to uncertainty of payment. Return on investment remains the top most desire of every business or business person.

Scholars and other researchers from this study would expand their knowledge on WC. It would enable them see the practicality of the subject in relation to the operations of

MFapart from just the concept they are introduced to in class. The research would also build on the already available knowledge as regards to this topic. The study will enable to narrow the gap in knowledge by determining the WC liquidity of MF, since most studies focused onWCM.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter focuses ontheoretical review exploringthe AgencyTheory, the CCC and the Keynesian Demand Theory for Money. Further, the chapter will go ahead to cover on the various factors which affect performance. The conceptual framework of the study shall be presented as well as ashort briefing of the literature.

2.2 Theoretical Review

This studywasanchored on the Agency Theory, the Keynesian Demand Theory for Money and the CCC theory.

2.2.1 Agency Theory

Meckling and Jensen (1976) were the founders of the agency theory. The theory categorically dwells on instances which the principal has the authority to dictate the agent, to perform some roles(s) in his own interest. Agency relationship alludes to a contract of basically extending the decision-making power to agents". This extension or delegation at times leads to agency problems. There exist several mechanisms to mitigate agency problems in the organization. For instance, proper remuneration for the managers rewards managerial effort to serve the owners' interests; this is what is referred to as the managerial incentive. Dividend mechanism helps in curbing managerial desires of making overinvestment decisions which will source funds from internal free cash flow. Bonding mechanism on the other hand helps managers to make best decisions or practice since they are restricted from switching jobs easily. Other means used to reduce agency cost include the owner's ability toselect reputable board of directors, their ability of firing agents and the threat of takeover.

Relevance of this theory to WC is felt where conflict of interest arises among managers, to make decisions or rather carry out activities for theirown benefit while putting the owner's interests at stake. This may further result in managers making poor investment and liquidity decisions. In the absence of proper supervisory mechanisms, managers may as well invest cash in non-viable projects. They may also capitalize in investing in the Negative Present Value (NPV) projects while satisfying personal gains. Agyei (2013) argue that instances could occur where managers may not exercise utmost care during their investment decisions. They could end up keeping lots of inventory, offering longer credit re-payment periods than usual to their debtors. Therefore, existence of principal-agent relationship may end up affecting the WC levels of a firm negatively, hence leading to liquidity issues in the organization and hence bankruptcy.

2.2.2 Keynesian Demand Theory for Money

Keynes (1936) came up with this theory on demand for money. The theory mainly addressed the purpose or motives why individuals/organizations hold money. In his theory, Keynes mentioned three motives which include the transaction, the speculative and finally the precautionary motive. The transaction motive addresses the requirement of making daily transactions using a medium of exchange which is money. The precautionary motive takes care of contingencies that require sudden expenditures or for enabling the organization take advantage of the unforeseen opportunities. The speculative motive on the other hand is of great importance since it means holding surplus money in the anticipation of investment which may earn them some interest in the near future.

This theory is of importance to this study since organizations are required to maintainWC at a particular margin to cater for the above mentioned motives. For the case of MF, the

transaction motive applies where cash would be required in the purchase of raw materials, remuneration of employees among others. On the precautionary motive, MF need to maintain some amount of cash just in case challenges in collecting their receivables occur and yet there are bills to be paid urgently due to deadlines or penalties that may accrue due to such payments. For the speculative motive MF may take advantage of government bonds once they are issued as they anticipate earning interest. This theory supports the maintenance of proper working levels in ensuring that firms are liquid enough to sustain the discussed motives.

2.2.3 Cash Conversion Theory

Gitman (1974) introduced this theorywhich is useful in controlling WC and its implications on liquidity. This theory states that, holding all factors constant, efficient handling ofWCwhich insinuates a shorter cash conversion cycle will increase an organization's liquidity, profitability and hence its value. The level of inventories, payables and receivables affects the liquidity position of an entity. This cycle revolves around the time frame financesare held in WC, basically how long it takes between paying and collecting cash from WC receipts. It can also be defined as a situation where the manufacturing process is too long, causing organizations to keep more cash tied up in stock. In the same breath, debtors or accounts receivables rise depending on how long it takes customers to settle their bills. If an organization delays to pay for its materials, the required amount of cash gets reduced since there would be no cash outflow at that particular moment. This simply means that accounts payables reduce the net WC.

This theory is relevant to WC since it shows a firm's effectiveness in managing its CA, secondly it depictsan organization'screditworthiness. ForMF, the theory takes care of the

time taken to acquire raw materials, up to the point at which the firm receives income from selling the final product. A shorter conversion cycle means greater liquidity, which leads to lesser borrowing, more opportunities of obtaining discounts in price when making purchases in cash. A longer CCCon the other hand increases the company's cash needs. This theory ensures that firms maintain proper levels of WC through obtaining a balance between the receivables period and the collections period, with a motive of ensuring the going concern of the business and to maximize the shareholder's value as well.

2.3 Determinants of Financial Performance

Financial performance measures the general financial health of an organization at a specified time. For this study, firms which shall have their CA exceeding their CL by more than half will be ranked as performers in the industry. The balance sheets of these firms will provide sufficient information to warrant this.Indicators likefirm size,leverage or debt levels as discussed at length below would affect firm's performance.

2.3.1 Firm Size

Shaheen and Malik (2012) look at the of size of a firm asitscapacity in terms of the quantity of production and the potentialit possesses or the diversity of services it can make available to its clients. Larger firms can produce commodities on lowered costs in comparison to relatively smaller firms. Companies in the presenttimes attempt to edge out competing businesses by expanding their size, ensuring that production costs are maintained at a minimum and increasing their market share. Dessand Beard (2011) mentioned that firm size is among the most recognized factors which influence an organizations productivity. Size is related to entity productivity. Amato and Wilder (2010) notethat larger companies have ease in accessing capital markets or their market power enables them have an upper

hand in using some services as compared to smaller firms. The size of a company is a contributing factor which aid in achieving economies of scale and due to this, there is expansion in production volumes hence the firm may reduce its normal unit costs.

The firm size can be determined by assessing the total asset base of an organization, the number of employees, the annual sales among other factors. On the basis of these factors, MF can be classified as micro or small or medium or large enterprises. The financial performance of these enterprises based on these categories differ in the manufacturing sector(Shaheen & Malik, 2012). The greater the asset base of an organization, the greater the potential for realizing high sales and consequently reporting high profitability levels. With regard to manufacturing firms, the size of the firm is related to the working capital levels which ultimately determines entity performance. However, large firm size may mean that a lot of costs are incurred in operations and sometimes the CA could be less than CL. This is detrimental for the short-term financial standing and credibility view by financiers (Dess & Beard, 2011).

The firms which are considered small generally incur less expenses for operations. They need less working capital compared to large firms to conduct operations. However, it does not mean that small firms do not perform better than large firms. Effect of firm size on performance generally depends on industry dynamics (Dess & Beard, 2011). It is possible for large firms to make less profit in absolute terms compared to small firms. The relationship that size has with performance based on empirical research is generally either positive or negative. The findings are generally mixed. Moreover, some studies find significant while others find insignificant relationship between size and performance (Shaheen & Malik, 2012).

2.3.2 Leverage Levels

Managers always consider increasing shareholder's wealth by making informed decisions, especially on capital structure so as to minimize the cost of capital. Most at timesorganizations relyon the use of debt. Where a firm employs the use of debt excessively, the financing cost is also increased thus leading to a drop on the return on equity which might lead to financial distress. Hence it goes with no say that highly geared firms would experience poor performance. It is therefore important to have an optimal debt to equity ratio since debt has an impact on the overall performance of an entity. Margaritis and Psillaki (2010) posits that every industry requires a given measure of assets so as to grow.

Leverage is necessary if the organization has to get sufficient funds to operate and invest. Hence, this determines the FP of the manufacturing entities. To boost performance, MF may have to borrow funds in addition to the equity of shareholders in order to operate successfully and survive in the business environment(Margaritis & Psillaki, 2010). Generally, financial researchers and academicians agree that high leverage is associated with increase entity value up to some point at which financial risk of the firm goes beyond tolerable levels as a result of increased use of debts. Increased debt is usually preferred as it reduces overall cost of capital but only up to the optimum levels, hence with optimal financial risk, firm value and performance is expected to increase with increased use of debt financing. The logic behind the use of debt is that when opportunities to expand working capital in order to increase sales are there, then borrowing of funds is justified. The reason is that as a financial manager, the reason for borrowing funds justifiably should

be accompanied by adequate forecasts of reasonable cash flow expectations of financial decisions (Margaritis & Psillaki, 2010).

Scholarly research on leverage and performance have generally shown mixed findings. There is considerable evidence however that leverage has significant effect on performance. It is on this ground that most researchers have adopted leverage as either an independent variable or control variable in the conceptual frameworks of various studies conducted on performance of entities, not just in the manufacturing sector alone. Studies have shown either a significant or insignificant effect that leverage has on entity performance.

2.4 Empirical Studies

Bulle (2016) studied effect of WCM and asset quality on firm profitability among MF listed in NSE. A population of ten firms in the manufacturing industrywas considered. Theresearch utilized raw information from the accounting statements of the companies. Descriptive research design was applied. Linear regression analysis was also very essential in measuring the influence both WC and asset quality management have on the performance of a company. The study found out that a low average collection period is healthy for organizations since it ensures improved cash flows. An increase in inventory turnover period promotes the financial success of entities listed in NSE. Account payables have a major role in coordinating and organizing WC. Postponing of payments may be costly to the organization in the long run. The research recommended that firms should keep track of asset quality in order to establish how productive the business is and to determine how much revenue is generated from investment in assets.

Mburu (2018) conducted a study to assess the relationship betweenWCM and total shareholder return of NSE-listed MF. Results were obtained from eight out of the nine entities studied. The scholar obtained data from various accounting statements which were available during the study. WC was measured using CCC with two control variables namely risk and firm size. With descriptive analysis, theinvestigation revealed that a negative relationship (-0.01) between shareholder return and CCC existed. This meant that when the cycle of converting cash is increased the shareholder return reduces. Hence the research recommended that firms need to reduce or make shorter the CCC in order to increase shareholder return. The scholar also recommended that firms should develop policies on inventory management, credit terms and payment of suppliers.

Mutisya (2017) studied WCand Kenya's cement manufacturing companies' profitability. Six cement manufacturing companies were examined. Raw information was obtained from the relevant audited accounting statements provided on the company's websites and the library. Descriptive survey was employed as the research design. Quantitative data was measured using multiple regression and later analyzed using SPSS.The research established that ROA and the firms' inventory and CCC are negatively related. It was also suggested that, value for shareholders can be created when days of accounts receivables are reduced, and those of payments increased. The study recommended that manufacturing companies should aspire having shorter cash conversion cycle for prompt cash realization to run the firm profitably.

Symekah (2017) conducted an investigation on WCM and NSE-listed manufacturing firms' performance.A population of ten MF was studied since sampling was not carried out.Information was obtained from various secondary sources. In ascertaining the level to

which variables were related, descriptive research was of essence.The study found out that the two variables are related. This shows that companies ought to take care of WC to avoid falling short of cash flow. This study recommended that firms should avoid overstocking which would adversely affect entity financial wellbeing. These firms should also offer perishable goods on credit to balance between holding costs and revenue.

Kiio (2014) conducted research on the effectof WCM onNairobi County's manufacturing entities' performance. Through stratified sampling, 43 out of 423 entities were selected. The research covered the period between 2009 and 2013.Data was obtained from secondary sources. Descriptive design was applied to describe how the variables were related. Resultsshowed a strong association that exists betweenWCM and entity performance. It was recommended that proper credit management should be considered in order to prevent overinvestment in accounts receivables.

Okungu (2014) examined WCM and Kenya's sugar producing firms' profitability. This work targeted a population of ten sugar producing companies licensed by the Kenya Sugar Board,which have been in operation between 2009 and 2013.The researcher employed descriptive design. Data was collected, later analyzed with the aid of Excel and SPSS.Findings revealed a positive connection betweenWCM and sugar firms' performance. This research proposed for optimal inventory levels to be maintained and prompt debt collection measures be put in place. This would bring about increased cash inflows hence good liquidity levels that would facilitate revenue generation leading to profitability. Ajaya (2018) conducted a study on financing WC and its effect on Indian manufacturing entities' profitability. This study used sampling where1211 firms were considered from the Indian economy between 2000 - 2016.A quadratic function was used

in capturing features of the parabolas. It was noted that there were sectoral differences as regards the effect of WC on performance in the Indian firms; with construction, chemical and consumer goods being able to use short term loans without adverse effects on financial performance.

2.4 Summary of Literature Review and Research Gap

This section summarizes the chapter. It was presented in a manner to respond to research questions which would finally depict WC levels of the firm. The key variables are presented on the conceptual framework. These variables were tested with an intention of rating the firm's liquidity. The literature also included theories and empirical studies which acted as a guide in designing the following chapter. Agency theory categorically dwells on instances which the principal has the authority to dictate the agent, to perform some roles(s) in his own interest. Agency relationship alludes to a contract of basically extending the decision-making power to agents. This extension or delegation at times leads to agency problems. It was noted that in WCM, conflict of interest arises among managers, to make decisions or rather carry out activities for their own benefit while putting the owner's interests at stake. This may further result in managers making poor liquidity decisions. In the absence of proper supervisory mechanisms, managers may make unjustifiable WC decisions.It was shown that firms take care of WC to avoid falling short of cash flow. It was noted that overstocking adversely affects entity financial wellbeing. It was found out that it is important that firms should offer perishable goods on credit to balance between holding costs and revenue.

Keynes theory on demand for money mainly addresses the purpose or motives for individuals/organizations holding money. In his theory, Keynes mentioned three motives

which include the transaction, the speculative and finally the precautionary motive. The transaction motive addresses the requirement of making daily transactions using a medium of exchange which is money. The precautionary motive takes care of contingencies that require sudden expenditures or for enabling the organization take advantage of the unforeseen opportunities. The speculative motive on the other hand is of great importance since it means holding surplus money in the anticipation of investment which may earn them some interest in the near future. It was noted that increased cash inflows hence good liquidity levels that would facilitate revenue generation leading to profitability.

According to the cash conversion cycle theory, holding all factors constant, efficient handling of WC which insinuates a shorter cash conversion cycle will increase an organization's liquidity, profitability and hence its value. The level of inventories, payables and receivables affects the liquidity position of an entity. This cycle revolves around the time frame finances are held in WC, basically how long it takes between paying and collecting cash from WC receipts. It was determined that a low average collection period is healthy for organizations since it ensures improved cash flows. It was found out that an increase in inventory turnover period promotes the financial success of entities listed in NSE. It was noted that account payables have a major role in coordinating and organizing WC. It was established that postponing of payments may be costly to the organization in the long run.The researcher found out that when the cycle of converting cash is increased the shareholder return reduces. From the empirical review, it was noted that different scholars studied WC management in different contexts or set ups for instance the sugar producing companies, manufacturing companies among others. However, the findings kept varying from one study to the other. Due to these conflicting results, the motivationto

conduct this study came up. Mutisya (2017) for instance sought to study WCM and Kenya's cement manufacturing company profitability. Chemis (2015) on the other hand examined WCM effects on sugar MF in Kenya. This study intends to bridge the gap in knowledge by deviating from that of Mutisya, which dwelt on cement manufacturing (the construction industry) and also from that of Chemis while focusing on the non-cement MF listed at the NSE.

2.5 Conceptual Framework

Researchers use the conceptual framework to depict diagrammatically the dependent and the independent variables in research. The conceptual framework is built up based on a conceptual hypothesis as to the relationship between variables, built from theoretical propositions or real-worldexperience of the happening of events.The study's framework is shown in Figure 2.1.

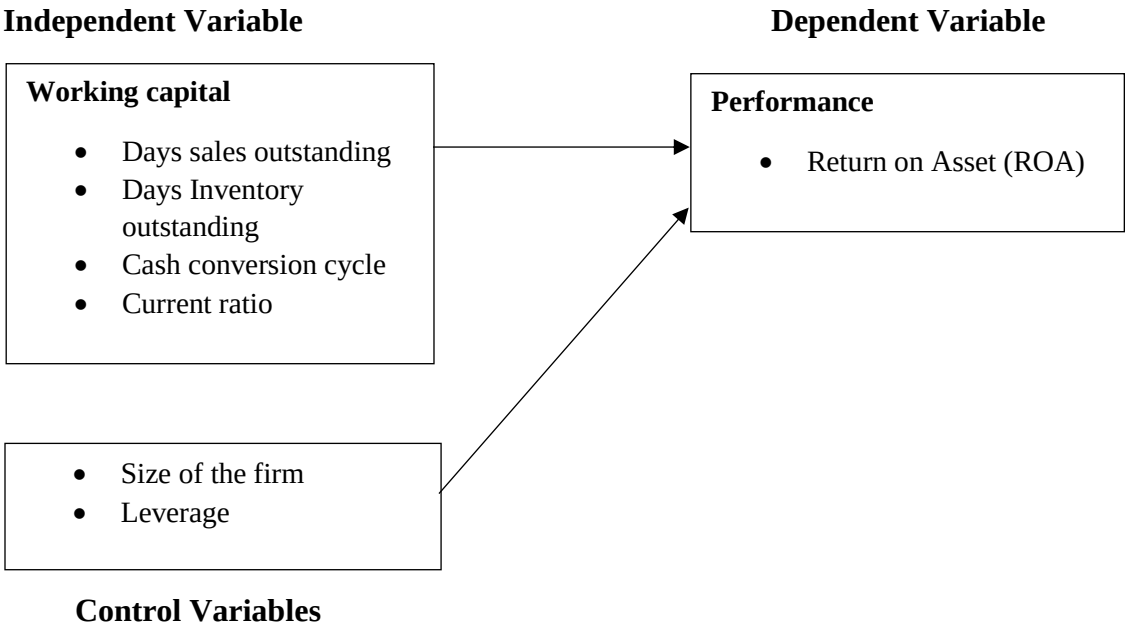

Figure 2.1: Conceptual Framework

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

Thesectionis of essence by informing on the methods which were applied in directing this investigation. It presents the research design, the population which was cross-examined, methods of collectingdata and steps of data analysis.

3.2 Research design

This research employed the use of descriptive design. Kothari (2010) states that, descriptive design of researchshallpresentthe situation as it exists. Creswell and Clark (2007) added that, a descriptive survey focuses onportraying the quality of marvels, inclination, subjects, and views of individuals necessary to the investigation. This research design helps in policy formulation as it leads the researcher to get a true picture as regards various research problems (Flick, 2009). Groves (2004) posits that descriptive research is easy to conduct and can enable the researcher get the perceptions, opinions and attitudes of people on various pertinent issues in a research study. Therefore, the researcher was looking forward to making use of this design.

3.3 Population of the Study

Cox (2010) talks of a population as a complete group of units put under study whose research data is used in making conclusions. This research was a census of allthe NSE-listed manufacturing entities from 2014 to 2018. The period relates to the current times hence provided the most current information. A census survey of these companies wastherefore undertakensince the population was relatively small.Another justification for the use of the census survey is that the researcher used secondary data of which getting it

wasn’t expensive as compared to when the data could be collected by conducting a survey in the case for example of using questionnaires to get primary data. The advantage of conducting census studies is that the researcher gets an accurate picture of the actual status of the population as regards the study variables and in line with study problem and objectives. When the researcher conducts a census survey, information relates to the population directly.

3.4 Data Collection

Collecting data is part and parcel of the research process and through it, the researcher can be able to achieve the objectives. Without data, there is no analysis that will be done implying that the whole research process and report writing fails. Thisprocess entailsobtaining vital information that supported the study. The researcher was permitted to undertake data collection by the University of Nairobi before the process was started. All procedures set by Capital Markets Authority were followed before the data was obtained. For this particular research, secondary data was utilized. Audited accounting statements for the MFfor the period of 2014 to 2018, served the purpose of providing the relevant data thatwas analyzed. The main source of secondary data for investigation werethe published annual financial statements and reports maintained by the Capital Markets Authority (CMA). This period was selected since it had the most current data which was relevant to the current study.Secondary data should be published information that is readily accessible by any interested parties. The researcher collected data that was pertinent to the study purpose.

3.5 Data Analysis

The essence of data analysis is to derive some meaningful information from the data that has been collected. Analysis is a technical process that will lead to the researcher finding answers to research questions or in case of hypotheses, form the basis for rejecting or failing to reject the hypotheses that guided the research. The researcher first coded the data and entered into SPSS. Before the data was analyzed, the researcher ensured that there were no missing entries in the data set. This would ensure that the analysis would not produce erroneous results. The researcher conducted descriptive analysis using frequencies, percentages, minimum (MIN), maximum (MAX) means and standard deviations (STDDEVs). Inferential analysis using Pearson correlation (PC) and multiple regression analysis was also fundamental for the achievement of study objectives. Correlation analysis was used in describing the extenttowhich one variable is related to the other. The regression model which was put to use is indicated below:

$$\mathbf{Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon}$$

Where;

Y = Dependent Variable(Financial Performance)

X_1 =DIO

X_2 = DSO

X_3 = CCC

X_4 =Current Ratio

X_5 = Size

X_6 = Leverage

α = the model intercept

β = Coefficient of Independent variable

$\boldsymbol{\varepsilon}$ = Error Term

3.5.1 Diagnostic Test

The critical assumption in most econometric models such as multiple regression model is that the error terms that result from making predictions using the model are normally distributed. This implies that the peak of the distribution of error terms is neither too high nor too low and not skewed either positively or negatively. It is the basis of most models and it is therefore necessary to verify that the assumption is met if at all accurate results from using the model are to be found. Normality test was done by use of Skewness and Kurtosis to test distribution of the data.

Another important assumption in multiple regression analysis is that there is a linear relationship between the independent variable(IV) and the dependent variable (DV). The implication as depicted in the multiple regression model is that a straight line can be drawn from the point of the constant in a graphical description of the relationship between the IV and the DV. This assumption is usually tested using residual plots. The assumption of homoscedasticity means that the variance of error terms resulting from adopting the multiple regression model for prediction purposes is constant.

The multiple regression model is also based on the assumption that there is no multicollinearity. Multicollinearity is said to exist when the IV are related implying that in the multiple regression analysis, if there is multicollinearity, the IV will not accurately and independently explain the variance of the DV. VIF and tolerance measures were used to

test the relationship between IV in line with verifying whether the assumption of multicollinearity was met.

The error terms being independent is among the assumptions of the multiple regression model. This implies that there is no autocorrelation of residuals. This means that successive data as arranged in SPSS or Excel are not showing any visible negative or positive signs for successive residuals. This assumption is usually tested using the Durbin Watson statistic which should lie between 1.5 and 2.5 if the assumption of independence is met.

3.5.2 Test of Significance

The researcher used the F-test to test the significance of the overall regression model. The F-test is usually based on analysis of variance. The t-test was used to test the significance of each in IV in explaining the DV. For these significance tests, the confidence level was 95%, meaning that the error allowed in testing null hypotheses was 5%.

3.6 Operationalization of Variables

Table 3.1Operationalization of Variables

Variable	Definition	Measurement	Source
Y	ROA	Net income/Average Total Assets	Gaurav, S. (2019).Are working capital decisions truly short-term in nature? *International Journal of Business Research,99,238-253*
X_1	DIO	(Average Inventory/ COS)*365	
X_2	DSO	(Accounts receivables /Annual Revenue)*365	
X_3	CCC	DIO + DSO-DPO	
X_4	Current Ratio	CA/CL	
X_5	Size	Natural log of assets	
X_6	Leverage	Total leverage/total assets	

Source: Research Findings 2019

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION

4.1. Introduction

The techniques for data analysis as well as data interpretationsare presented in this chapter. Discussions of research findings are also provided in detail.

4.2. Descriptive Statistics

The researcher conducted descriptive analysis usingMAX, MIN, mean and STDDEV. Descriptive analysis helps in understanding the data better.

Table 4.1Descriptive Statistics

	N	MIN	MAX	Mean	STDDEV
ROA	45	-.13	4.15	.4924	.80507
DIO	45	8.66	250.09	88.3904	60.88969
DSO	45	25.08	291.92	97.8402	63.09754
CCC	45	-938.94	231.55	-20.8567	189.53668
CR	45	.03	9.43	2.0509	1.91202
FS	45	13.26	21.33	16.6224	2.15321
LEV	45	.00	1.91	.5121	.39231

Source: Research Findings 2019

Results indicate that ROA had mean of 0.492 and STDDEV of 0.805 having MINV of -0.130 and MAXV of 4.150. Days Inventory Outstanding (DIO) had mean of 88.3904 and STDDEV of 60.88969 having MINV of 8.66 and MAXV of 250.09. This means that MF need to shorten their credit days simply because liquidity of every company is very important in the sense that, available cash can be re-invested to earn more returns. Whenever longer days are given to debtors,MF need to maintain their market share by extending payment days for their debtors.

TheCCC shows the days from inventory purchase and accounts receivables. Its mean was -20.25 and STDDEV of 189.37 and this had aMINVof -938.94 and MAXV of 231.55.The

MINV indicates that MF need to shorten days of collection of debt so that the financial position of the company is enhanced or improved. Further interpretation is that when the CCC is shorter, manufacturing companies don't lock up their cash in the stock or inventory for so long and this improves the company's position to pay their suppliers in good time

Table 4.1 also gave descriptive statistics of Days Sales Outstanding (DSO). The outcome of the analyzed data gave a mean of 97.84 and STDDEV of 63.097 having MINV of 25.08 and MAXV of 291.09. The interpretation is that DSO can be calculated every month, quarterlyorannually. Days Sales Outstanding ratio gives the customer base having credit problems, in other words these are sales made by the MFbut the cash has not been collected. Having fewer number of days is an indicator that manufacturing firm's liquidity is strengthened by the collection efforts of the firms.

CRdescriptive was given in the same table 4.1 which gave meanof 2.0509 and STDDEV of 1.91 having MINV of .03 and MAXV of 9.43. Current ratio was done in order to give manufacturing company's position on how the can manage to pay their CL effectively. Results have ruled out that MF'CA exceeds CL hence being liquid enough to pay their debts on daily basis.

Firm size (FS) results indicated that mean value was 16.62 and STDDEV of 2.15. ItsMINV was 13.36 and MAXV of 21.33. The firm size results showed that MF have strong asset capitalization base. Leverage (LEV) analysis was done and gave a mean value of 0.5121 and STDDEV of 0.3923 having MINV of 0.00 and MAXV of 1.91. For the leverage having mean value of 0.5121 signify that MF are highly geared.

4.3. Normality Test

For this study, the level of confidence was 95%. It's from this level of confidence the results of skewness and kurtosis scores were anchored.

Table 4.2Normality Test

	N	Mean	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
ROA	45	.4924	2.973	.354	9.819	.695
DIS	45	88.3904	1.131	.354	.659	.695
DSO	45	97.8402	1.304	.354	1.564	.695
CCC	45	-20.8567	-2.883	.354	12.098	.695
CR	45	2.0509	2.309	.354	5.680	.695
FS	45	16.6224	.702	.354	-.096	.695
LEV	45	.5121	1.182	.354	2.619	.695
Valid N (listwise)	45					

Source: Research Findings 2019

Table 4.2 contained descriptive statistics for testing normality of the data which was used for the study so as to obtain the specific research objectives and the research hypothesis. The results of both skewness and kurtosis had positive figures and both were below 1.96. This meant that the data which was used for this study was somehow rightly skewed and had peak (leptokurtic) in comparison to distribution that is normal.All standard error results were both less than 1.96 indicating that deviation or variation from the normal was not extreme.

4.4 Correlation Analysis

The researcher carried out correlation to examine the IV and theDV's relationship.

Table 4.3Correlation Coefficient

		ROA	DIS	DSO	CCC	CR	FS	LEV
	PC	1						
ROA	p-value							
	N	45						
	PC	.293	1					
DIO	p-value	.051						
	N	45	45					
	PC	-.439**	-.204	1				
DSO	p-value	.003	.179					
	N	45	45	45				
	PC	.191	.339*	-.071	1			
CCC	p-value	.208	.023	.643				
	N	45	45	45	45			
	PC	-.121	-.101	-.079	.129	1		
CR	p-value	.427	.508	.605	.398			
	N	45	45	45	45	45		
	PC	.050	-.568**	.196	.034	-.325*	1	
FS	p-value	.742	.000	.197	.824	.029		
	N	45	45	45	45	45	45	
	PC	-.456**	-.403**	.443**	-.412**	-.454**	.424**	1
LEV	p-value	.002	.006	.002	.005	.002	.004	
	N	45	45	45	45	45	45	45

Source: Research Findings 2019

Results from the above table 4.3 showed the associations between the different IVwith ROA. DIO and ROA indicated a weak positive relationship of 0.293. The interpretation is that these results were not significant at 95%. Further interpretation is that when DIO increases by one percent there is an increase of 29.3 percent in ROA.The analysed data also showed a weak positive relationship between CCC and ROA of 0.191. These results were not significant at confidence level of 95%. Results meant that when CCC increases by one percent, there in an increase of 19.1% on ROA.Finally on positive correlation, results indicated that there was amoderate positive relationship between FS and ROA of

0.50. These results were not significant at 0.05. The interpretation is that when FS increases by one percent, ROA increases by 50%.

Correlation results in table 4.3 above on negative associations are explained as follows; Results ruled out that there was weak negative relationship between DSO and ROA of -0.439. At confidence level of 95% results were significant. The relationship revealed that when DSO increases by one percent, ROA decreases by 43.9 %.Results also indicated there was aweak negative relationship between CR and ROA of -0.121. The analysis of the data was not significant at confidence level of 0.05. The results showed that when CR increases by one percent there is a decrease inROA by 12.1%.Lastly correlation analysis was carried out in order to understand how leverage and ROA relate. There is negative relationship between leverage and ROA of -0.456. These results were significant at 95% confidence level. The interpretation is that when leverage increases by one percent, ROA decreases by 45.6%.

4.5 Multicollinearity Test

Table 4.4Pairwise Correlation

	Statistics	
	Tolerance	VIF
(Constant)	.399	2.509
DIS	.767	1.303
DSO	.622	1.608
CCC	.551	1.815.
CR	.422	2.369
FS	.765	1.765.
LEV	.435	2.300
Valid N (listwise)		

Source: Research Findings 2019

Table 4.4 above contains multicollinearity results basically for variables of the study. Multicollinearity test was done by both collinearity statistics of tolerance and Variance Inflation Factors (VIF).According to the Ghazali (2010) the multicollinearity problem exist when VIF is more than 10 and tolerance level is greater than 1.Theresearcher achieved the rule of the thumb in that, according to the results all the VIF results are less than 10. Researcher also looked at the tolerance results and also ruled out that there was no problem because all the outcomes are less than 1.

4.6 Regression Analysis

Table 4.5Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.689[a]	.474	.391	.62820	.474	5.710	6	38	.000	1.301

a. Predictors: (Constant), LEV, DIS, DSO, CCC, CR, FS
b. DV: ROA

Source: Research Findings 2019

Regression analysis helped examine the fitness of the model. Model summary testing was done by having results of F-test and p-value so as to indicate the significance of the model which was used for the study. By use of P-value, this model was found significant having p-value of 0.000, (0.00<0.05). For the results of adjusted R in this model, 39.1% of the variables in financial performance are explained by WC which was measured by ROA.The remaining 60.9 % is explained by other variables not in the regression model.

4.7. ANOVA ANALYSIS

Table 4.6ANOVA Table

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.521	6	2.254	5.710	.000[b]
	Residual	14.996	38	.395		
	Total	28.518	44			

a. DV: ROA

b. Predictors: (Constant), LEV, DIO, DSO, CCC, CR, FS

Source: Research Findings 2019

Results for predictors that is LEV, DIO, DSO, CCC, CR, FS was given by the above Table 4.5, ANOVA table. The predictors were about financial performance of MF which were measured by ROA. The significance outcome indicated that all the predictors had a significant relationship on financial performance of MF at confidence level of 95%; (P= 0.000< 0.05).

4.8 Regression Model Analysis

This study was based on hypothesis testing so as to find the significance of the IV in the study.

Table 4.7 Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-1.583	1.364		-1.161	.253	-4.344	1.178
	DIS	.004	.002	.298	1.598	.118	-.001	.009
	DSO	-.003	.002	-.238	-1.769	.085	-.006	.000
	CCC	-.001	.001	-.154	-1.034	.308	-.002	.001
	CR	-.087	.067	-.207	-1.304	.200	-.222	.048
	FS	.168	.068	.450	2.486	.017	.031	.305
	LEV	-1.189	.366	-.579	-3.247	.002	-1.930	-.448

Source: Research Findings 2019

From the regression model analysis table 4.7 above, model equation was;

$$\mathbf{Y = -1.583 + 0.004X_1 - .003X_2 - 0.001X_3 - 0.087X_4 + 0.168X_5 - 1.189X_6 + \varepsilon}$$

Where;

Y = Financial Performance

X_1 =DIO

X_2 = DSO

X_3 = CCO

X_4 = Current Ratio

X_5 = Size

X_6 = Leverage

α = the model intercept

β = Coefficient of IV

$\boldsymbol{\varepsilon}$ = Error Term

The model revealed that holding both the independent and control variables constant, there would be ROA of -1.583.This shows that mean performance would still be constant at -1.583 despite the influence of a one unit shift in the WCvariables. Further, a unit change of days' inventory outstanding would increase financial performance by 0.004.A unit change of days' sales outstanding would reduce performance by 0.003.A unit change on the CCC would reduce ROA by 0.001.If the current ratio changes by one unit, financial performance tends to reduce by 0.087.Financial performance increases with 0.168 where there is a unit change in the size of the firm. Finally, when leverage changes by a unit, ROA tends to reduce by 1.189.

4.9 Discussion of Findings

The study involved the selection of IV which were used in measuring WC andwere subjected to various tests of analysis to produce the findings. It was determined that actually WC management had a positive effect on the performance of these firms as depicted by the precedingresults. Symekah (2017) while investigating the effect of WCM on theFP of MF listed at the NSE, established that there was a significant effect between WCM and performance. Kiio (2014) also examined the effect of WCM on the FP of MF in Nairobi County and found out that there was a strong association between the two. Both studies advocated for proper credit management so as to ensure that MF do not fall short of cash flows. The results did not deviate from the traditional thinking or belief that proper WCM would lead to a better financial position of firms.

From the findings, finance managers are challenged to ensure that debtors be given a shorter period so that to enhance the collection of revenue. The cash conversion cycle also need to be shortened so that inventory is easily converted into cash. All these suggestions

are made necessary to mitigate against chances of illiquidity which can result to bad ratings when the firm cannot pay its debts. Due to the nature of MF of holding large volumes of inventory, these managers are put to task to balance between avoiding stock outs as they ensure that they do not fall short of money to operate. They need to strike a proper balance so as to ensure that overstocking is also avoided due to the holding costs that come along with it.The managers ought to study the trends of demand of products so as to achieve these optimal levels. The findings revealed that these MF had a huge asset base. This was a good indicator that WC would be well taken care of and the shareholder's value improved. The current ratio also met the requirement of CA to CL having an ideal ratio of 2:1.This is very necessary in ensuring that short term obligations are met as soon as they arise.

CHAPTER FIVE:SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

It is in this chapter whereby findings are summarized upon and recommendations given. Also further research is proposed concerning the study objectives and problem.

5.2. Summary of the Study

Facts found from earlier works about whether WC management impinge on company's fiscal accomplishment revealed the fact that varied outcomes were founded upon DIO, CCC, DSO, Current Ratio, Size and leverage. Nine MF were assessed within five years (2014-2018). Regression coefficients were deduced by way of SPSS. In making certain that adequate levels of independence within the models being measured are on hand, annual statistics over the whole research duration was gathered.

It was noted that when the CCC is shorter, manufacturing companies don't lock up their cash in the stock or inventory for so long and this improves the company's position to pay their suppliers in good time. It was noted that having fewer number of days is an indicator that manufacturing firm's liquidity is strengthened by the collection efforts of the firms.Results indicated that MF CA exceeds CL hence being liquid enough to pay their debts on daily basis. It was noted that MF are highly geared.

On determination of the effect of days' inventory outstanding, results indicated a weak positive relationship between DIO and ROA. Further interpretation is that when DIO increases by one percent there is an increase in ROA. Secondly, the research sought to evaluate the effect of days' sales outstanding on FP. Correlation results ruled out that there was a weak negative relationship between DSO and ROA. The relationship revealed that when DSO increases ROA decreases to a certain extent. On assessing the effect of cash

conversion cycle on FP, correlation results showed a weak positive relationship between CCC and ROA. Correlation results meant that when CCC increases there in an increase in ROA.

When establishing the effect of current ratio on FP, correlation results indicated there is a weak negative relationship between CR and ROA. The results showed that when CR increases there is decrease in ROA.On investigating the effect of firm size on FP, correlation results indicated that there is a moderate positive relationship between FS and ROA. These results were not significant at 0.05. Further, results showed that when FS increases ROA increases by certain percentage. Finally, when examining the effect of leverage on FP, correlation results found that there is a negative relationship between leverage and ROA. The interpretation was that when leverage increases by one percent, ROA decreases by a certain percentage.

5.3 Conclusion of the Study

In conclusion, the study realized that WCM has a positive association with FP of the nine MF which were put to study for the period 2014-2015.In order for these firms to survive during these harsh economic times, financial managers need to come to speed and apply their WCskills effectively. This would ensure that the debt collection team is prompt at their work so as to maximize on revenue collection to ensure smooth running of the organization. A ready market for the firm's products need to be established as well, to allow for circulation of money or prevent cash being held in stock for longer periods. The managers also need to ensure that their creditors are paid promptly to avoid bad publicity.

Results indicated that the DIO and the CCC had a positive relationship with ROA.Given that the utmost goal of every firm is profit maximization, financemanagers are also tasked

with maintaining a trade-off between profitability and liquidity. This is one of the major responsibilities that would ensure that the MFobtain a better financial standing. Finally, managers need to consider having an optimal capital structure. This calls for the managers to ensure debt and equityare kept at equilibrium. Financing through leverage or debt does not necessarily bring about the enjoyment of the tax shield, however could also lead the firm to serious WC issues leading to bankruptcy or rathera breakdown of operations for the MF.

It was concluded that DSO has negative insignificant effect on financial performance. This implies that the longer the number of days accorded to debtors, the more likely that entity performance declines. However, the effect is insignificant meaning that DSO does not have notable statistically relevant effect on financial performance that can be modeled to predict the later.

The study concluded that CCC of MF negatively but insignificantly affects financial performance of MF.This implies that longer CCC does not have statistically significant effect in determining performance. Hence, CCC cannot be used to significantly predict performance in a model of forecasting.

It was also concluded that current ratio has negative insignificant effect on MF performance.The implication is that having large amount of current assets leads to foregoing positive cash flows for the entity. Moreover, current ratio cannot be included in a predictive model to significantly predict financial performance.

It was also concluded that gearing has negative significant effect on MF performance. The implication is that having large amount of debts leads to negative performance for the

entity. Moreover, leverage level can be included in a predictive model to significantly predict financial performance. Thus, in all decisions on the level of debt for the firm is very important in determining financial performance of the entity in the business environment.

5.4 Recommendations of the Study

Considering that this work appends heaviness to the case that monetary strategy of management might bring noteworthy insinuation for organization's success, it gives significant inference for practice as well as policy in the perspective of manufacturing industry in Kenya. Recently, several manufacturing companies in the sector have fallen down into statutory ownership, due to unsuitable strategies of monetary management (viewed as the chief reason of bad fiscal performance). Owing to this information, this research gives out a warning to the sector's participants to stiffen their strategies of fiscal management, especially related to WC management.

The study recommends that MF need to shorten their credit days simply because liquidity of every company is very important in the sense that, available cash can be re-invested to earn more returns. Whenever longer days are given to debtors, MF need to maintain their market share by extending payment days for their debtors. It is also recommended that MF need to shorten days of collection of debt so that the financial position of the company is enhanced or improved.

This study also recommends that the cash conversion cycle of MF needs to be shortened. This is significant in that it aids in ensuring that the entities have adequate cash resources to carry out transactions and place their financial resources in other revenue generating entities of the enterprises. The more it takes for credit sales to be converted to cash, the more the funds of the entity stay outside and hence resulting in loss of profits.

As regards the balance between CA and CL, the researcher recommends that the optimum level of 2:1 be maintained at all times in the enterprise as it is associated with improved financial performance. This will ensure that no much funds of the entities are tied up in current assets which generate less returns as compared to when the funds are invested elsewhere, such as in treasury bills of the government which may generate more returns. Increasing this ratio would not be recommended beyond the optimal standard level in financial management practice.

It is also recommended that the firms in manufacturing sector should not have a lot of debts when compared with the equity that they have. This is meant to avoid decreased entity financial performance which is associated with high gearing level.

5.5 Limitations of the Study

The research was restricted to manufacturing companies listed in the NSE whileit excluded industries e.g. banking as well as investment. This hindered generalization of the outcome. The work as well concentrated on one gauge of fiscalaccomplishment- ROA. It is very important to be in the know that there exist supplementary procedures offiscal accomplishmente.g. gross profit margin, ROCE, ROE, asset turnover, dividend yield as well as net profit margin.

The work was restricted to 5 years. This was little time to monitoralteration in the variables and portray a desirable trend. It also didn't give timefor wide-rangingexamination of the correlation between WCM and monetaryaccomplishment. The other limitation is the difficultyof the workto attaininformation from the manufacturing organizationsbecause a couple of companiesviewed the data as private. The datautilized wassecondary hencescholarsfailed toconcludethat it was corrupted or presented the true and fair view.

Working capitalvariesduring different times of the year or in certain spellsas per thecurrent economyas well as demands for products. The resultsmight not mirror the exactout-turn of WCuponmonetaryachievement of manufacturing companiesduring the time put in consideration. The outcomein this research alsomight notbe comprehensiveamong every manufacturing companies, however it may be put to use as a reference to manufacturing companies in third world nations,because they encounter sameissuescaused bysimilarcurrent economiesin contrast withcompanies in already developed nations.

5.6 Suggestions for Further Research

This study zeroed in on determining the effects of WCM on the performance of NSE-listed manufacturing entities.Further research can be done on the same, while considering other firms in different sectors. From the regression analysis also, it was determined that these variables of WC could only explain performance (ROA) to a certain percentage. Other studies could also be carried out to establish the other variables which affect performance other than those of WC.

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Appendix I: List ofManufacturing Firms Listedatthe Nairobi Securities Exchange

1. Unga group Limited
2. Flame Tree Group Holdings Limited
3. Carbacid Investments Limited
4. Kenya Orchards Limited
5. Eveready East Africa Limited
6. B.O.C Kenya Limited
7. East Africa Breweries Limited
8. British American Tobacco Kenya Limited
9. Mumias Sugar Company Limited

Appendix II: Raw Data

Year	Company name	Return on Assets (NI/ATA[Previous yr+currn tyr/2)	Days Inventory Outstanding	Days Sales Outstanding	Cash Conversion Cycle	Current Ratio	Firm Size (measured by natural log of total assets)	Leverage (T.L/T.A)
2014	BOC	0.26	101.42	90.68	-107.87	2.14	14.65	0.2405
2015	BOC	0.25	105.76	104.69	-140.52	2.06	14.66	0.2615
2016	BOC	0.24	105.66	115.24	-173.57	2.28	14.61	0.2374
2017	BOC	0.23	114.64	109.37	-229.77	1.95	14.62	0.2771
2018	BOC	0.22	113.89	106.84	-220.46	1.88	14.58	0.2905
2014	EVEREADY	0.25	196.09	68.57	183.21	1.33	13.74	0.7651
2015	EVEREADY	0.11	182.74	75.14	154.59	0.98	14.23	0.4666
2016	EVEREADY	0.07	240.79	105.06	144.9	0.45	13.90	0.4575
2017	EVEREADY	0.03	250.09	131.41	168.46	2.69	13.56	0.2890
2018	EVEREADY	0.05	225.23	220.69	231.55	2.53	13.26	0.2372
2014	MUMIAS SUGAR	0.03	53.46	88.16	-3.8	0.41	16.98	0.5484
2015	MUMIAS SUGAR	-0.08	46.53	134.67	-135.22	0.19	16.83	0.7097
2016	MUMIAS SUGAR	-0.07	27.34	74.9	-251.83	0.18	17.11	0.7152
2017	MUMIAS SUGAR	-0.12	31.05	195.7	-437.04	0.11	17.00	0.9686
2018	MUMIAS SUGAR	-0.13	34.41	172.26	-938.94	0.03	16.57	1.9142
2014	UNGA GROUP LTD	0.21	66.27	39.9	45.16	2.27	15.90	0.4160
2015	UNGA GROUP LTD	0.24	49.98	36.52	42.31	2.37	15.97	0.3841
2016	UNGA GROUP LTD	0.27	49.67	37.91	42.72	2.30	15.94	0.3890
2017	UNGA GROUP LTD	0.26	51.68	42.18	29.88	1.66	16.06	0.4807
2018	UNGA GROUP LTD	0.34	54.86	47.99	33.08	2.14	16.11	0.4353
2014	EABL	0.50	100.79	49.82	-5.18	0.72	17.96	0.8552
2015	EABL	0.49	114.82	47.68	13.22	1.02	18.02	0.8005
2016	EABL	0.50	106.88	58.69	-39.39	0.77	17.94	0.8240
2017	EABL	0.48	72.80	55.86	-70.72	1.01	18.02	0.8202
2018	EABL	0.47	68.26	44.41	-89.35	0.83	18.08	0.8365
2014	CARBACID	0.23	45.56	72.52	-2.66	6.30	14.74	0.1485
2015	CARBACID	0.19	45.56	78.32	-33.02	4.51	14.90	0.1656
2016	CARBACID	0.18	37.98	76.11	-41.33	7.09	14.94	0.1316
2017	CARBACID	0.18	77.08	78.56	-95.04	6.80	15.01	0.1158
2018	CARBACID	0.16	80.31	71.31	-33.33	9.43	15.03	0.0971

2014	KENYA ORCHARDS	0.06	41.18	123.8	72.06	1.77	17.73	1.4549
2015	KENYA ORCHARDS	0.11	23.10	167.7	83.51	2.08	18.18	0.9235
2016	KENYA ORCHARDS	0.10	8.66	219.3	108.7	2.02	18.31	0.8909
2017	KENYA ORCHARDS	0.13	11.71	260.05	114.07	1.71	18.50	0.8577
2018	KENYA ORCHARDS	0.17	63.09	291.92	152.94	2.11	18.56	0.7884
2014	FLAME TREE	0.60	37.77	117.28	17.88	1.55	20.73	0.6413
2015	FLAME TREE	0.69	38.15	109.76	30.98	1.64	21.01	0.5613
2016	FLAME TREE	0.64	48.14	111.81	51.83	1.53	21.14	0.5272
2017	FLAME TREE	0.50	58.23	118.31	66.13	1.29	21.24	0.5648
2018	FLAME TREE	0.43	64.39	111.48	57.41	1.14	21.33	0.5580
2014	BRITISH AMERICAN TOBACCO	4.15	145.52	32.61	28.35	1.25	16.13	0.0000
2015	BRITISH AMERICAN TOBACCO	2.31	173.77	26.11	66.2	1.45	16.03	0.0000
2016	BRITISH AMERICAN TOBACCO	2.13	140.22	25.08	68.51	1.41	16.07	0.0000
2017	BRITISH AMERICAN TOBACCO	1.92	134.59	28.3	55.46	1.32	16.11	0.0000
2018	BRITISH AMERICAN TOBACCO	2.18	137.45	28.14	47.38	1.59	16.02	0.0000