Business & Social Science
IJRBS

Research in Business & Social Science

IJRBS VOL 10 NO 2 ISSN: 2147-4478

Available online at www.ssbfn.net
Journal homepage: <https://www.ssbfn.net/ojs/index.php/ijrbs>

Working capital management practices and operational performance of selected supermarkets with national network: Evidence from Kenya

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ARTICLE INFO

Article history:

Received 10 January 2021

Received in rev. form 25 Feb. 2021

Accepted 02 March 2021

Keywords:

Working Capital Management;
Operational Performance; National
Network; Kenya

JEL Classification:

M10, M40

ABSTRACT

This paper examined the effect of working capital management practices on the operational performance of selected supermarkets with the national network in Kenya focusing on inventory and creditors' management as well as receivables and liquidity practices. The paper was pegged on Agency Theory, Iceberg Theory of Money Management and Cash Management Theory. Guided by descriptive research design, 52 branch managers were sampled from four major supermarkets using both the stratified and random sampling methods. Data were analyzed using both descriptive and inferential statistical analysis. Findings revealed that inventory and creditors management practices had a very low effect on the operational performance of supermarkets in Kenya. The study, therefore, recommends that supermarkets should introduce a system where managers are fully equipped with working capital management skills. This should be done continuously to prevent the occurrence of severe liquidity challenges which have witnessed in the past.

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Introduction

Working capital management is the management of a firm's current assets and current liabilities, which are usually liquidated in one years' time or less. It is therefore important for firm's daily running operations. This is the money that is required by the firm in order to finance its day-to-day activities that generate revenue. Working capital management plays an important role in the determination of the future of the firm as far as its performance is concerned, since it has a lot of impact on firm liquidity and profitability. Nonetheless, efficient working capital management is one of the major sources of raising capital. It helps in ensuring a firm continues operating, satisfies maturing short-term debt and emerging operating expenses. In order to efficiently manage working capital, one has to manage inventories, receivables and payables not forgetting management of cash. One cannot manage working capital without involving short-term assets and short term liabilities relationship.

Management of both short-term and long-term financial assets are very important with the former directly helping in maximizing profit of a firm, its liquidity and also improves its overall performance. Therefore, by a business undertaking the role and drivers of working capital, it can upgrade its overall financial performance and minimize risks. Measuring working capital management relates to investigating the extent of aggressive financing and investing. There seems to exist an important relationship between profitability, creditors' payment period and the time sales take place. Supermarkets in Kenya play a significant role in the growth of the Kenyan economy. As the economy continues to grow, there is need to create more business opportunities by creating new supermarkets and expanding the existing ones. However, in the absence of effective working capital management, most supermarkets do experience serious liquidity challenges thus even resulting in receivership.

The recent financial crisis in Nakumat, Uchumi and Tuskys Supermarkets have shown how important it is for supermarkets to maintain reasonable cash for its daily operations. During business's economic downturn and times when it is in credit constraints, such stores are likely to face liquidity risk. Most supermarkets are still unable to properly assess their cash needs. Long term financing and short term credit are two ways of financing a supermarket. For firm's adequate capital expenditure, it needs to have long term financing unlike for short term which is needed for firm's daily operations like payment of casuals, daily purchases among others.

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<https://doi.org/10.20525/ijrbs.v10i2.994>

The deeper the financial sector, the greater the economic growth promotion it does. According to Etiennot (2015), economic efficiency, growth and investment are increased by a well-organized and functioning capital market. Once the supermarket increase economically, it greatly support the growth of the country's economy at large since most people get employment, payment of government taxes increases and many other developments related to economic growth. The main aim of this research was to determine the impact brought by good working capital management in supermarket and find ways of improving their economic growth in future. According to Karim et al., (2017), efficient working capital management (WCM) practices is also necessary for Supermarkets during the blooming economic periods, for the reason that WCM practices is related to all aspect of managing current assets and current liabilities. According to Etiennot et.al. (2016) WCM practices is not only to immunize Supermarkets from financial turmoil but can be managed strategically to improve competitive position and profitability which is one of the main problems of Supermarkets in Kenya.

There are benefits are usually associated with working capital management practices and the Supermarkets are expected to benefit from it at the end of this research. Working capital management practices is important with regard to its direct effect on supermarket's liquidity. Second, working capital management practices is important for managing its worth. Many Supermarkets put in significant amounts of cash in both accounts receivable and inventory, and frequently depend on short-term payables as a source of financing, according to Enqvist et.al. (2014). Therefore, the efficient use of a Supermarkets' current assets and liabilities, generally referred to as working capital management, is a main task of day-to-day management practice and demands careful consideration through well-structured working capital management practices.

Karim et.al. (2017) asserts managing the financial requirements and operations of any organization is very important to its management, because it has an effect on both liquid assets and profits of the firm. Financial needs are mainly classified into two types of needs: working capital needs and fixed capital needs. That part of finance which enables an enterprise to perform its day-to-day operations is called working capital. There is need to analyze short term assets and liabilities carefully in order to manage the liquidity. Management of working capital helps managers to manage their operation through making available cash to pay for short-term debt and the maturity of long-term debt as well as expenses resulting for daily operations. So, an optimal level of working capital must be kept to tradeoff between return and risk (Goel, 2015).

Working capital can be obtained through different forms like assets which are necessary for production of income or investing sources, loans (from owners, bank), delayed payments, cash and cash alternatives. Thus, the accounts receivables and inventories comprise a substantial percentage of the total firm's assets. Inventory management, strikes an equilibrium in the midst of deficit stock and surplus stock. Inventory is made up of huge numbers of quick/liquid assets especially in firms mainly dealing in retail trading. Inventory management performance is a huge determinant for the prosperity or downfall of a business. For a huge reduction of investment in working capital and exceptional operational performance, the organized management and orderly control of inventories assist in it all. Thus, the overall business objective should be inventory management since it has a remarkable capacity on profitability. This is because a well-established inventory management levels outcomes by intensifying competitive ability and market share of a firm.

Excessive levels of current assets can easily result in the firm realizing a substantial return on investment. In order for the firm to operate smoothly, it should have enough current assets. Since working capital management components consist of cash management, accounts receivables management and inventory management, each of the components above has two dimensions; that is time and money. The management of working capital in a supermarket is therefore, time which by extension is money (Mohammed, 2018). Precisely, for money to move faster along the working capital cycle, money due from debtors must be collected quickly, reduce the inventory levels relative to sales, thus reducing the amount of money tied up. This way, the business will generate more cash, or it will need to borrow less money to fund working capital. The rate of return in a firm's investment is what is referred as profitability in business.

Profitability is the creation of shareholders value which is achieved by efficient management of working capital, which is an integral component of the overall corporate strategy as observed by (Lins, et al. 2017). The main reason why businesses are operated is to make profit. If the business continuously make losses, it will end up being closed. It is therefore very vital for every businessman to focus on profit taking and project future profit. According to Enqvist et.al. (2014), profitability is measured with income statement of a business for one accounting period. Therefore, profitability is the most important measure of success of the business.

Working capital management entails short term decision, generally, relating to the next one-year periods which are reversible and these decisions are based on cash flows. Large inventory and generous trade credit policy may lead to high sales. The larger inventory also reduces the risk of stock out. Trade credit policy may stimulate sales because it allows a firm to access product quality before paying (Karim et.al., 2017). Accounts payable is another component of working capital. For a firm to access quality of bought products, it requires to delay paying their suppliers. This acts as a source of cheap and flexible finance source. Though this can be expensive in the long run especially when it comes to discounts offered by firms when they make payments in time or even before the specified time. Cash conversion cycle is a popular instrument of measuring working capital management. This is the time taken from the time goods/raw materials were purchased and when trade receivables were collected from finished goods. If the firm takes longer time to collect cahs from sales, the longer the time it takes to invest in working capital. The longer the cash conversion cycle, the higher the profit since this results to higher sales. However, working capital profitability rises very fast even better without even

having to hold more inventories or give more credit than before. Supermarkets in Kenya are distributed in different towns and cities across the country, some of them in shopping malls and others at strategic places within residential areas. Nakumatt supermarket held the top position until when it started facing challenges that led to the closure of all of its branches. It had taken over as the anchor tenant in most of the biggest malls across Kenya, but that is no longer the case.

This is because for the chain supermarkets to thrive and enjoy consistence growth they must have a well versed knowledge on the concept of working capital management which can be mainly utilized in two ways. One gross working capital which mainly emphasize on the current assets as the firm main investment .Secondly, net working capital which is obtained from the difference between the current assets and current liabilities, this clearly stipulates the position of the firm both inform of liquidity and profitability and help firm reach a decision on whether to finance the current assets from long-term borrowing or Ploughing back profit (Mathura, 2010). Nakumatt Holdings and Tuskys have exited the retail market in Kenya but other foreign and local retailers are capitalizing on the gap that have emerged to pitch their tent. Despite many factors resulting to some retailers existing the market working capital management is one of the key issue (Kweri, 2011). The retail supermarket chains in Kenya comprises of the major supermarket that sell a variety of the households goods under one roof. The Kenyan market has been dominated by local and foreign retailers namely, Carrefour, Choppies (Ukwala), Nakumatt, Tuskys, Uchumi, Naivas, and Eastmatt. By the time of its closure, Tuskys Supermarket was even being natured by the Nairobi Securities Exchange (NSE) to become listed. While Uchumi Supermarket has been a listed firm at the NSE for decades (Onyuma, 2020).

One of the key sector in Kenyan economy in the retail market registering a growth of 7.5 percent, ahead of the agriculture, manufacturing, transport and communication sectors, (National Economic Survey, 2015). More notably, many of the retail supermarket 40 percent fails by the first year of startup while 60 percent close down their operations in year three. Working capital management have been cited to be main reason behind this emergence failures (Nyamao, 2012). Even though numerous studies about working capital management have been undertaken in both developed and developing countries; this study add to the discussion by examining the practices of the working capital management and its determinants in developing markets like Kenya. This study therefore seek to bridge this gap by analyzing the effect of working capital management practices on operational performance of Supermarkets in Kenya. In specific, it examined the variables that affect the working capital requirements in Kenyan supermarkets, given that little attention has been given to the operations of supermarkets in the short term.

Supermarkets in Kenya play a significant role in the growth of the Kenyan economy. As the economy continues to grow, there is need to create more business opportunities by creating new supermarkets and expanding the existing ones. Over the past few years, there has been unprecedented growth and expansion of supermarkets in major towns in Kenya. On the other hand, some supermarkets have closed down, yet others have reduced the number of their branch networks all over the country.

Kenyan government of late has been encouraging self-employment, uplifting economic growth and reduction of poverty which is much supported by supermarkets development in various parts of the country and mostly in rural areas. However, it has been discovered that 60% of them fail as soon as they start operating due to mismanagement of working capital. This report has been derived from the managers in various supermarkets. Insufficient investment in working capital and increases of business's risk of financial distress may lead to its being technical insolvent as it may not be able to meet its obligations such as paying its debts on time, paying salaries, electricity bills, tax, water bills, and other expenses it incurs in the course of doing business.

Supermarkets managers need to undergo continuous training on how to manage working capital in order to improve business profit. They need to balance between how much cash to keep, what level of inventory to stock or how much accounts receivable to have. Literature is scarce on studies which have been carried out exclusively on the impact of working capital management on the profitability of Supermarkets with national network in Kenya. This study therefore seeks to bridge this gap by analyzing the effect of working capital management practices on operational performance of Supermarkets in Kenya. Specifically the paper assessed the effect of inventory and creditors' management practices on the operational performance of selected supermarkets with national network in Kenya.

Literature Review

Theoretical Background

A theoretical definition is an abstract concept that defines a term in an academic discipline Liu et al (2019). Without a falsifiable operational definition, conceptual definitions assume both knowledge and acceptance of the theories that it depends on. A hypothetical construct may serve as a theoretical definition, as can be seen from the definition. A structure (housing) that can support a theory which has been researched in a study is defined as a theoretical framework. It helps drawing closer the researcher access/connect to the already researched theory.

A number of theories guided this study. First, Agency Theory has been one of the most important theoretical paradigms in finance and accounting during the past years. The primary features that made agency theory attractive to researchers in the field of finance, economics and accounting is that it explicitly allows us to incorporate conflict of interest, incentive problems and even the mechanisms for controlling problems associated with incentives into our models. The information value is a derivative of better decisions as well as higher profits which result from its use as observed by (Bosse & Phillips, 2016).

Agency Theory is relevant to working capital management in the supermarkets since the owners entrust management to other people (employee/agents) but not the owner/principals. They are the ones who make all the important decisions of daily operation of the business such as short-term assets and liabilities management, payment of creditors, collection of debts, inventories and liabilities management. The more the motivation in monitoring and giving security to this investment's, the higher the ownership concentration. Shogren (2015) maintains that foreign institution owners monitor property well compared to other ownership. Boyle et al., (2016) asserts that investment decisions for foreign financial institutions which mostly are managed by fund managers are well monitored hence less agency problems. The investment decisions are strong and grounded since the managers are well trained/skilled and experienced for the same.

According to Enqvist (2014), this theory in line with describing the management of working capital, it also demonstrate the benefits such as solvency, efficiency, profitability, liquidity and in maximization of shareholders wealth. This can only be derived from management of working capital by the firm. There is need for a mix of short- and long-term financing of current assets in firms to achieve maximum returns (Ahrens, 2015). The theory applies in this study since the management of supermarkets is done by the employees and not the owners of the supermarkets. Due to the separation of the management to its owners, this brings agency issues that can bring conflict between the owners and the managers. Managers can make decisions to favor themselves and not to benefit the business. Managers who are agents act on behalf of the shareholders who are principles in the process of maximizing profit. At times under concentrated ownership, some shareholders are not protected. This creates agency principal conflict. Aktas (2015) has used Agency Theory in her study on factors affecting working capital management in Supermarkets. In this study, the agents being managers of supermarkets will have personal interest in the supermarkets. They might want to buy goods at a cheaper price even if they are not of the best quality so as to make more profits for personal gain. The principals being the owners of supermarkets may want to sell quality goods even if they do not make profit, just to maintain their good reputation.

Secondly, the Iceberg Theory of money management was advanced by Varma (2009). It says that money management expertise has four components: knowledge; skills; attitude; characteristics. Knowledgeable people make financial mistakes too because they may not have the right skills or attitude towards money management. Varma (2009) divided the above components into two: The visible that is, knowledge level and skill level can be seen and can be improved by reading up blog, dailies, magazines and in-service training but this visible part is only 10-15 percent of what it takes to manage money; The hidden part that is, it depends on one's attitude and other characteristics like what one values, what is learned from parents and from others. This hidden part accounts for 85-90% of what it takes to manage money, this theory is applicable to all the variables of the study.

Lastly, Cash Management Theory provides the process of planning and controlling cash flows into and out of the business, cash flows within the business, and cash balances held by a business at a point in time (Pandey & Jaiswal, 2011). According to the theory, efficient cash management involves the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little. The theory provides the process of planning and controlling cash flows in and out of the business. The theory informs the study as it will help to bring more understanding to the process of cash handling and test whether the firms subscribe to the guidelines provided by the theory. It will then be easy to link subscriptions to this guidelines and performance of the firm. The handling of cash is in itself a risk and the more inflows there is, the more risky it becomes hence proper measures should be put in place to curb the frauds. The purpose of cash management is to determine and achieve the appropriate level and structure of cash, and marketable securities, consistent with the nature of the business's operations and objectives, this theory is applicable to all the variables of the study.

Empirical Review

According to Wild (2017) inventory, when managed in proper ways will facilitate a profit maximization and enhancement of company's growth. However, for the firm to affirm it has efficient management practices as far as inventory is concerned, it must be in a position to determine the economic order quantity and quality, know how much to order, when to order, from which supplier, maintain order levels and be in a position to bear the cost of maintaining it among others.

Economic order costs, are those costs which must be incurred which involve among others, holding cost: According to (Maguraushe, 2015), inventory management refers being in a position to decide the quantity that one should order which should be economical and determine in advance the cost of maintaining a desired level of inventory. Inventory management involves some costs which are very necessary but need to be managed very well in order to reduce unnecessary cost. When too much or very little stock is held, this will lead to unnecessary extra cost of managing too much stock which covers unnecessary space and it might even get outdated when in store or even be mishandled. The more the stock held, the more the holding cost which include space of the warehouse, workers, security, among other variable costs. Understocking can cause higher cost of making too many orders which can be caused by holding too little stock hence have emergency orders or lack inventory for sale when needed by customers. The firm therefore needs strong inventory and effective inventory management measures and system in order to have reliable sale forecasts for use in ordering inventory. Shen, Deng, Lao, & Wu (2016) observed that maintaining optimal inventory levels reduces the cost of possible interruptions or of loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations. As observed by Center, Alliance and Insurance (2016), the time taken to convert inventory held into sales is known as ICP and is used as a proxy/substitute for inventory management policy as far as is concerned.

As observed by Runyora (2012) among other researchers left a gap which the researcher wants to bridge. The researcher conducted a research on inventory management on supermarkets with national network branches in Kenya. She also found out its relationship with working capital management on financial performance on supermarkets especially those with national network branches in Kenya. She also investigated how this relationship will save cost, expenses, create profit and also improve the performance of supermarkets at large which was not covered by the previous researchers.

Runyora (2012) on a study on relationship of profit made by 131 listed companies and working capital management between 2001-2004, discovered that firm that had increased their accounts receivable do increase profit through increased sales. In order for a firm to increase its performance financially, it has to reduce cash conversion cycle and net trade cycle. If working capital is managed in an efficient manner, it increases shareholders value. This is according to studies conducted by (Lavender, 2015). He carried out a study consisting six different firms whose data was collected for a period of four years from 1996-2006. These data were collected in Bursa Malaysia where he wanted to see the relationship between working capital management and profitability. He also discovered that to increase shareholders wealth, cash conversion cycle has to be very short and standard.

Runyora (2012) did a study of management of working capital in oil industries in Kenya. It was discovered that profits made by these industries was mainly due to good management of working capital of the firm hence direct positive relationship between working capital management of the firm and its profitability. Leverage was found to positively influence the profitability of oil firms in Kenya. In order for the oil firms to remain productive, it was decided that working capital management policies be employed. It will help in making investment mix and policy decision, match investments to the targeted objectives, balancing risk against profitability and asset allocation.

Thiuru (2013) investigated the effects of working capital management on corporate profitability among firms listed at NSE. It is therefore concluded that day sales inventory are negatively related to returns on assets and returns on sales. ROS is influenced by DPO and they are both positively related. Management of cash conversion to the required level as can be indicated by this study and also working capital, will improve the profit of the firm cycle. Malombe (2014) studied the relationship between working capital management and profitability of reinsurance companies in East Africa. According to this study, it can be read between the lines that profitability of reinsurance companies in East Africa and working capital management are inseparable. Therefore, through management and keeping different components of working capital at a recommended level, the businesses can make profit. They should collect their debts as quick as possible and delay payment as much as possible taking into consideration not to strain their relations with suppliers. The study recommends that reinsurance companies should ensure that they have a framework on managing the working capital since it has direct impact on their profitability. The researcher observed that despite all these researchers conducting research on working capital management on various fields, no one has conducted a study on effects of working capital management practices on operational performance of selected supermarkets with national network in Kenya, which is so wanting. There is therefore, an urgent need for this study so as to reduce and even have a permanent solution on the closure of Supermarkets in Kenya.

Mathai (2010) examined the relationship between working capital variables and profitability of retail supermarket chains in Kenya. Her study consisted of six retail supermarket chains in Kenya. The objective of the study was to determine whether there exists a relationship between WCM and profitability. The study showed that in the retail sector, WCM has a significant impact on profitability of firms and plays a big role in value creation for shareholders as longer Cash Conversion Cycle (CCC) and average collection period have a negative impact on net operating profitability of a firm. The CCC offers an easy and useful way to check the WCM efficiency of a company. The study also revealed that there exists a positive non-significant relationship between the financial debt ratio and profitability. Consequently, an increase in debt utilization, leads to a decrease in profitability. Thus, concluding that leverage negatively influences profitability. Given that minimal study has been done on the relationship between working capital management and firms' performance in the merchant retail sector in Kenya, this study sought to bridge the gap by undertaking a study on major supermarkets.

A study by Masio (2012) to determine the relationship between working capital elements and profitability of Uchumi Supermarket, indicated that total current assets, total current liabilities, total inventory, current ratio and cash at bank had a positive correlation with Return on Total Assets (ROTA) while accounts receivable and accounts payable had a negative correlation with ROTA. However, only the cash ratio had a significant relationship at one level of significance. The retail market has been the subject of some profound changes over the recent past. The mix of social and economic conditions which prevailed in the 1980s triggered the arrival of a much more discerning consumer, driven not just by value for money but also increased selectivity and a demand for higher quality shopping environments. Therefore, working capital management is a simple concept but yet difficult in implementation due to the complexities surrounding retailing supermarkets.

Inventory management is both a science and an art of ensuring that just enough inventory is held by the organization to meet demand. The main objective of IM is to inform managers how much to re-order, when to re-order, how frequently products should be reordered and the minimum safety stock required. Ogbo, Okenanma & Ukpere (2014) notes that an effective inventory management ensures that inventory is held at the right place, at the right time and at the desired quantities. It also involves setting of replenishment cycles, forecasting, valuation, available space for inventory, quality management, managing returns and defective goods and demand.

forecasting. Excessive inventory results to additional holding costs and hence increased operational costs affecting the bottom line of the organization. Inventory management results to faster inventory turnover hence cash management.

Inventory management is one of the key factors for a firm's competitiveness especially in modern retail. Its complexity increases with the number of store keeping units, the degree of varying demand and the complexity of the supply chain. It is almost impossible to have goods arriving where needed at the exact time when the need for them arises. Fluctuation in demand at the different levels and unreliability of a supply chain could cause firms to hold inventory to cushion them from going out of stock in case of delayed deliveries. Other times, organizations hold inventory for price protection, to gain quantity discounts or to achieve less ordering costs. Whereas these could be beneficial reasons to hold inventory, it causes incremental costs to the company (Muller, 2011). It is therefore of great importance for a firm to have proper inventory management systems that ensure that the right levels of inventory are held to achieve the desired service levels at minimum cost.

The supervision of inventory (non-capitalized) assets and stock items is what is meant by inventory management. The movement of stock from the manufacturers to wholesale and from this area to the retailers or supermarkets (supply chain management). According to Wild (2017) inventory, when managed in proper ways will facilitate a profit maximization and enhancement of company's growth. However, for the firm to affirm it has efficient management practices as far as inventory is concerned, it must be in a position to determine the economic order quantity and quality, know how much to order, when to order, from which supplier, maintain order levels and be in a position to bear the cost of maintaining it among others.

Economic order costs, are those costs which must be incurred which involve among others, holding cost: According to Kamau & Kagiri (2015). Inventory management refers being in a position to decide the quantity that one should order which should be economical and determine in advance the cost of maintaining a desired level of inventory. Inventory management involves some costs which are very necessary but need to be managed very well in order to reduce unnecessary cost. When too much or very little stock is held, this will lead to unnecessary extra cost of managing too much stock which covers unnecessary space and it might even get outdated when in store or even be mishandled. The more the stock held, the more the holding cost which include space of the warehouse, workers, security, among other variable costs. Understocking can cause higher cost of making too many orders which can be caused by holding too little stock hence have emergency orders or lack inventory for sale when needed by customers. The firm therefore needs strong inventory and effective inventory management measures and system in order to have reliable sale forecasts for use in ordering inventory concerned Shen, Deng, Lao, & Wu (2016) observed that maintaining optimal inventory levels reduces the cost of possible interruptions or of loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations. As observed by Center, Alliance and Insurance (2016), the time taken to convert inventory held into sales is known as ICP and is used as a proxy/substitute for inventory management policy as far as is concerned (Shen, Deng, Lao, & Wu 2016)

As observed by Krajewski (2013), among other researchers left a gap which the researcher wants to bridge. The researcher conducted a research on inventory management on supermarkets with national network branches in Kenya. She also found out its relationship with working capital management on financial performance on supermarkets especially those with national network branches in Kenya. She also investigated how this relationship will save cost, expenses, create profit and also improve the performance of supermarkets at large which was not covered by the previous researchers.

Also in supermarkets, entry of new competitors in Kenya, both local and foreign firms has been one of the key changes in the industry in the recent past. Some firms have also exited due to increased rivalry in the sector, changes in the offerings and use of technology in more areas than in the past. E-commerce has also grown significantly in the retail market with Kenya being one of the most technologically advanced countries in the continent. Platforms such as Jumia, Killimall, and Olx amongst others have made a great impact on how customers shop and are a major change in the retail business (KPMG, 2015). There is pressure on the brick and mortar retail stores to reduce their operating cost to remain competitive in the future as they compete with the e-commerce firms whose business models ensure that they don't hold any inventories. Ensuring that the right inventory levels of each product are held at the right place is hence a key issue for the brick and mortar firms to achieve the operational goals and ensure their long-term survival in the retail space and thus need for this study.

Credit management is the process of granting credit, the terms it's granted on and recovering this credit when it's due. This is the function within a bank or company to control credit policies that will improve revenues and reduce financial risks. Crucial decisions need to be made not only in managing cash, account receivables and inventories, but also in management of account payables (Subrahmanyam, Tang and Sarah, 2017). The objective of credit management practices is to attain longer credit terms from suppliers while optimizing on available terms of discounts. Paying bills is an integral part of any business, no matter what field one is in. A solid accounts payable policy can not only lead to improved cash flow but also to better relationships with vendors, suppliers and other creditors. The most important account payable practice is to make sure one is not paying more than the absolutely necessary like in the form of late fees, unnecessary interest charges, lost discounts for quick payment and other penalties. This means one needs to know exactly how much is due to each creditor and when at any given time.

A good way to go about doing this is to keep all the due dates and amounts owed in a central location instead of constantly relying on a myriad of paper bills. Most small businesses can easily meet this challenge with a simple spreadsheet. At many levels, a good accounts payable policy is also good public relations policy. It is important to keep a line of communication open with all your

creditors. If a bad cash flow problem arises which will cause you to be late on your bills, letting your creditors know in advance is almost always appreciated. Many may be willing to make alternate arrangements with you, especially if they know you have a good payment history and a temporary hardship. According to Agha (2014) creditors are a vital part of effective cash management and should be managed carefully to enhance cash position of a business. Management of creditors and suppliers is very important as slow payment by a firm may create ill-feeling and can signal that the business is not doing well. According to Danis (2017), if the firm does not pay its suppliers in time, it retains a lot of cash which enables it to have a smooth daily operations which can be very cheap and flexible source of finance to the firm.

On the other hand, delaying of such payables can be expensive if a firm is offered a discount for the early payment. This can also cause a lot of problems in cash constraints if cash is not received in time hence delaying very crucial operations of the firm which calls for cash flow. According to Zettelmeyer (2018) the time taken to pay suppliers is the APP which is used as a proxy for accounts payable management policy. APP is calculated as average accounts payable divided by credit purchases multiplied 365 days. According to research done, most authors have studied credit management in general. None of them have touched on specific firm hence the need to study effects of credit management on financial performance of firms like supermarkets especially those with national wide branches in Kenya. This will touch a wide area of credit management hence improve economic growth of the country, since supermarkets play a big role in the Kenyan economy.

Research and Methodology

Descriptive survey research design was employed and 52 respondents were sampled for survey using both random and stratified sampling following Mugenda & Mugenda (2012). The study focused on four supermarkets in Kenya, specifically those that do retail in large scale and their registration details was obtained from the licensing board, which provided the target population. Four supermarkets, Tuskys, Naivas, Uchumi and Nakumatt were selected for the study. The target population comprised 21 branches of Tuskys Supermarket, 20 branches of Naivas Supermarket, 7 branches of Uchumi Supermarket and 4 branches of Nakumatt Supermarket.

The study used the estimation of sample size in research using (Mugenda & Mugenda, 2012) formula to determine sampling size. Afrifa (2016), also used the same formulae in working capital influence levels on SMEs profitability. Questionnaires and document analysis were the methods used to collect data. Both secondary and primary data was collected. A pilot study was carried out in then Spear and Jamaa Supermarkets in Laikipia County, where validity was achieved by pre-testing questionnaires to identify and change any ambiguous, awkward or offensive questions. The instruments were tested high reliable with a reliability coefficient of 0.712.

While collecting primary data, structured questionnaire was used in which enumerators issued questionnaires to the branch managers and gave them time to go through them, and collected them later. Likert scaling of 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree were attached to questions exploring the dimensions of working capital management. Secondary data was also collected from the financial statements of the surveyed supermarkets using a data collection sheet. Data was analyzed through descriptive statistical and inferential analysis via regression analysis.

The paper employed the following analytical models in the analysis:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 +$$

β_0 = Constant; $\beta_1 \dots \beta_4$ are coefficients to be estimated.

Y= Operational performance – a proxy for financial performance – measured by a composite of ROA and ROE; X_1 = Inventory management practices; X_2 = Creditors management practices; X_3 = Liquidity management practices; and X_4 = Debtors management practices.

Return on assets was determined as follows:

$$ROA = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

Return on equity was computed as follows:

$$ROE = \frac{\text{Net Income}}{\text{Avg. Stockholder's Equity}}$$

Where, Stockholders Equity = Total Assets - Total Liabilities

The study used the F-test and the t-test at 5 percent significance level, where the computed statistics was compared to the critical values. If the critical value exceeds the computed statistic then the coefficient was deemed not significant. Hence, the study failed to

reject the null hypothesis, otherwise if the critical value did not exceed the computed statistic then the coefficient was significant and the study failed to reject the null hypothesis. The study also used the *t*-test to test for the statistical significance of the individual coefficients at an alpha level of 0.05.

Findings

Analysis of Inventory Management Practices and Operational Performance

Table 1 presents results which shows the frequencies and responses of the composite measures of inventory management practices. The respondents were asked to indicate whether supermarkets put in place enough measures to measure lead time for products. A significant majority (83%) agreed that supermarkets put in place enough measures to manage lead time for products, (3.8%) did not commit themselves while (13.5%) indicated that supermarket did not put in place enough measures to manage lead time for products. Mean of the question was 4.07. This means that most supermarkets try to hasten the inventory turnover by putting in place enough measures to measure lead time for products. The finding of this study is supported by Alvarez & Barney (2017) whose study found that where supermarkets put in place measures to measure lead time, there is a high return in the long run.

Table 1: Analysis of Inventory Management Practices

Inventory Management Practices	1	2	3	4	5	Likert Mean
The supermarket puts in place enough measures to manage lead time for products.	7.7	5.8	3.8	38.5	44.5	4.072
Reorder levels are managed continuously.	0	0	3.8	50.0	46.2	4.42
Overstocking is a common problem that leads to too many unmanageable items.	13.5	30.8	9.6	21.2	25.0	3.13
The supermarket is experiencing increase in costs of holding stocks.	21.2	9.6	1.9	32.7	34.6	3.5
Personnel charged with management of inventory are not skilled.	9.6	19.2	3.8	42.3	25.0	3.54
Overall Mean	10.4	13.46	4.6	37	35.1	3.84

A significant majority of the respondents (96.2%) agreed that inventory reorder levels are managed continuously. A very small percent (3.8%) of the respondents did not commit themselves while none of the respondents indicated that reorder levels were not managed continuously. Mean of 4.42 was the response. It means that almost all the supermarkets agreed that reorder levels are managed continuously. This is supported by the study done by Ahrens (2015) whose study on working capital management in SMEs found out that well managed reorder levels increase performance of the business.

When the respondents were asked to indicate whether overstocking is a common problem that leads to too many unmanageable merchandises, majority (46.2%) were in agreement while (9.6%) had no idea, while (44.3%) of the respondents indicated that overstocking is not a common problem that leads to too many unmanageable merchandises. A mean of 3.13 shows that overstocking is a big problem. These findings were concurrent with those of Baños-Caballero (2014) who reported that a number of supermarkets usually have issues of overstocking which needed to be looked at.

Also, a significant majority of the respondents (67.3%) held the view that supermarkets are experiencing increase in costs of holding inventory, (1.9%) did not commit themselves, while (30.8%) held a negating view that supermarkets are not experiencing increase in costs of holding inventories. The responses had a mean of 3.5, meaning that cost of holding inventory is a major problem as experienced by the surveyed supermarkets. This corresponds to findings by Baños-Caballero (2014) that supermarkets experience high cost of holding stock which can lead to reduction in the intended profit.

In addition, (67.3%) of the respondents agreed that personnel charged with management of inventory are not skilled and (3.8%) were neutral. However, (28.8%) indicated that personnel charged with management of inventory are skilled. The responses had a mean of 3.54 that shows that most supermarkets staff charged with responsibility of managing inventory lack the requisite inventory management skills. Aburn et al., (2016) has also observed the same trend in a study which found out that good personnel's skills are positively related to good inventory management.

The overall mean of the objective was 3.84 which suggested that most of the respondents agreed that inventory management practices highly influence the operational performance of the organization. This finding is consistent with other studies such as Aktas (2015) whose study established that good management of inventory results to better operational performance of supermarkets.

Analysis of Creditors Management Practices and Operational Performance

The respondents were requested to indicate whether the supermarkets-maintained account payable below 50 percent of all debts owned at the end of every month. From Table 2, a significant majority (67.3%) agreed that they always maintain account payables below 50 percent of all debts owed at the end of every month, (3.8%) did not commit themselves while (28.9%) indicated they did not maintain account payables below 50 percent of all debts owed at the end of every month. The mean for the response was 3.54. Majority of the respondents agreed that they always maintain accounts payable below 50% of all debts owed as indicated by 67.3 percent. The study findings are similar to those of Wanjohi (2013) who studied the relationship between working capital management and profitability of supermarkets in East Africa, and concluded that there exists relationship between working capital management and Profitability of supermarkets in East Africa.

Table 2: Analysis of Creditors Management Practices and Operational Performance

Creditors Management Practices	1	2	3	4	5	Likert Mean
We always maintain account payables below 50 percent of all debts owed at the end of every month	13.5	15.4	3.8	38.5	28.8	3.54
The supermarket has a solid accounts payable policy	7.7	15.4	11.5	30.8	34.6	3.69
The supermarket management tracks number of invoices received and processed daily	23.1	25.0	0	17.3	34.6	2.98
The management ensures that average time to approve is favorable to business operations	9.6	13.5	11.5	28.8	36.5	3.69
We ensure payment arrangements have low risk for the organization	7.7	19.2	7.7	25.0	40.4	3.71
Overall Mean	8.32	17.5	6.9	28.1	35	3.52

A significant majority of the respondents (65.4%) agreed that the supermarkets have a solid accounts payable policy. (11.5%) were neutral, while (23.1%) indicated that the supermarkets did not have a solid accounts payable policy. The responses had a mean of 3.69. That means a very high percent were for the idea. The findings agree with that by Agha (2014) who found that efficient management of accounts payable would help a firm maximize profits which will go a long way in maximizing shareholders' wealth.

When the respondents were asked whether supermarket management tracks number of invoices received and processed daily, a significant majority (51.9%) of the respondents were in agreement, while none (0%) of the respondent said had no idea and (48.1%) of the respondents disagreed with the statement that the supermarket management tracks number of invoices received and processed daily. The answer was almost 50-50 which made it very difficult to conclude. The mean of the response was 2.98. This finding is however consisted with the findings of Garg (2015). Also, Wanjohi (2013) and Olongo (2013) assessments of working capital management of the firms found a direct relationship between WCM and financial performance

On the question of whether the management ensures that average time to approve is favorable to business operations, majority of the respondents (65.3%) indicated that management ensures that average time to approve is favorable to business operations, (11.5%) did not commit themselves, while others (23.1%) held the view that management did not ensure that average time to approve is favorable to business operations. Again, the response had 3.69 as the mean. This shows that Kenyan supermarket management ensures that average time to approve is favorable to business operations. The findings are in line with those of Alhassan (2018), who recommended that supermarkets should have average time to approve its documents. However, the results contradict those of Bassey (2015) who found a negative relationship between the two variables.

Furthermore, most of respondents, (65.4%) agreed that supermarkets ensure payment arrangements have low risk for the organization. (7.7%) were neutral, while (26.9%) were indifference. The responses had a mean of 3.71. This shows that most of them agreed with the idea. This implies that there is a positive relationship between creditors' management and operational performance. The overall mean of the objectives was 3.52, indicating that most supermarket managers agreed. This is supported by a study done by Boyle et al., (2016) who recommended that supermarkets should have arrangements and priorities on payments of its debts. The findings of this study are similar to the existing empirical literature such Olongo (2013) and Wanjohi, (2013). The assessment of current liquidity management practices of the commercial banks by Wanjohi (2013) showed that there was a direct relationship between liquidity management and financial performance.

Analysis of Liquidity Management Practices on Operational Performance

The results contained in Table 3 shows the frequencies and responses of the composite measures of liquidity management practices. The respondents were requested to indicate whether they agree that supermarket has policy on maintenance of current ratio. A significant majority (78.8%) agreed that supermarket has policy on maintenance of current ratio, (5.8%) were neutral, while (15.4%) disagreed. The responses had a mean of 3.77 which is close to 4. This means that most respondents agreed that supermarkets have

policy on maintenance of current ratio. This finding is in line with Aktas (2015) assessment of working capital management in financial institutions, indicating that most businesses do have liquidity policy for their operations.

Table 3: Analysis of Liquidity Management Practices and Operational Performance

Liquidity Management Practices	1	2	3	4	5	Likert Mean
The supermarket has policy on maintenance of current ratio	13.5	1.9	5.8	51.9	26.9	3.77
The tilly cash is maintained on an hourly basis	13.5	15.4	15.4	25.0	30.8	3.44
We always maintain reasonable operating cash flow ratio in our supermarket	17.3	17.3	11.5	26.9	26.9	3.29
There is a weekly horizon of managing liquid cash in our supermarket	15.4	17.3	7.7	15.4	44.2	3.56
Overall Mean	14.9	13	10	30	32.2	3.52

The respondents were also requested to indicate whether Tilly cash is maintained on an hourly basis. A significant majority 55.8 agreed that Tilly cash is maintained on an hourly basis, (15.4%) did not commit themselves while (28.9%) indicated that Tilly cash is not maintained on an hourly basis. The responses had a mean of 3.44, indicating that most of them were 4. The study is supported by Garg (2015). Where he discovered that operational performance had a positive relationship which Tilly cash management

A significant majority of the respondents (53.8%) also agreed that they always maintain reasonable operating cash flow ratio in their supermarket. (11.5%) of the respondents did not commit themselves while (34.6%) did not maintain reasonable operating cash flow ratio in their supermarkets. The responses had a mean of 3.29. This shows that majority of the respondents agreed that they always maintain reasonable operating cash flow ratio in their supermarket (53.8%). The results concur with that of Alvarez & Barney (2017). He mentioned that there is need to maintain cash flow in proper business operations in order to have smooth running of the business.

When the respondents were asked to indicate their view whether there was a weekly horizon of managing liquid cash in supermarkets, a significant majority (59.6%) agreed while (7.7%) had no idea and (32.7%) of the respondents indicated that horizon management of liquid cash in supermarkets was not done weekly. The responses had a mean of 3.56 which shows that there was a weekly horizon of managing liquid cash in supermarkets as indicated by majority (59.6%). The overall mean of the objectives was 3.52. This is consistent with Garg (2015), who found out that there must be adequate liquid cash management for supermarkets to operate smoothly.

Analysis of Debtors Management Practices and Operational Performance

The results in Table 4 shows the frequencies and responses of composite measures of debtors' management practices. The respondents were asked to indicate whether supermarkets have policy on account receivables. A significant majority (61.6%) agreed that supermarkets have policy on account receivables, (9.6%) were neutral, while 28.9 percent indicated that supermarkets did not have policy on account receivables. The question had a mean of 3.31 and this shows that most responses agreed that supermarkets have policy on account receivables. This finding is supported by Huang (2017) assessment of inventory management of SMEs that found out that in order for businesses to succeed, they must have set out policy on both accounts receivable and accounts payable.

Table 4: Analysis of Debtors Management Practices and Operational Performance

Debtors Management Practices	1	2	3	4	5	Likert Mean
The supermarket has policy on account receivables	15.4	13.5	9.6	48.1	13.5	3.31
We let our customers know of the policy we have in dealing with debts before we enter into a deal with them	17.3	17.3	7.7	32.7	25.0	3.31
Bad debts are a substantial challenge in our supermarket	9.6	3.8	7.7	32.7	46.2	4.02
We have debt recovery mechanisms in place	23.1	5.8	1.9	30.8	38.5	3.56
We always ensure that 90% of all debt's receivable are cleared by the end of each month	11.5	5.8	5.8	19.2	57.7	4.06
Overall Mean	15.5	9.24	6.54	32.7	36.2	3.65

The respondents were also asked whether they let their customers know of the policy they have in dealing with debts before they (customers) enter into a deal with them (supermarket). A significant majority (57.7%) agreed, (7.7%) had no idea and (34.6%) disagreed. The question had a mean of 3.31 which show that most of the respondent were for the idea. This finding is supported by

Huang (2017) study of inventory management of SMEs, which found out that in order for businesses to succeed, they must have set out policy on both accounts receivable and accounts payable.

Moreover, when the respondents were asked to indicate whether they agree with the statement that bad debts are a substantial challenge in supermarkets, (78.9%) agreed, (7.7%) did not have any idea, while 13.4 percent were not for it. The respondents' mean was 4.02 which shows that most of the respondents were for the idea, indicating that bad debts are a substantial challenge in supermarkets. This finding is in line with that of Waithanka (2012) evaluation of working capital management on agricultural firms that reported that firms must clear debts in time to avoid being put under receivership.

On the question of having debt recovery mechanisms in place, majority of respondents (69.3%) indicated that they have debt recovery mechanisms in place, (1.9%) did not comment on this issue and (28.9) held that they did not have debt recovery mechanism in place. The response had a mean of 3.56, which shows that most respondents were for the idea. A good number of managers (76.9%) agreed that they always ensure that 90% of all debts' receivable are cleared by the end of each month. (5.8%) were neutral, (17.3%) of them disagreed with the idea. The responses had a mean of 4.06 which indicates that most responses were for the idea suggesting that they always ensure that 90 percent of all debt's receivable are cleared by the end of each month. The overall mean of the objective was 3.06. This is supported by a study done by Aburn, Gott & Hoare (2016) who recommended that business firms should put more emphasis on advertising and building brand awareness of their products.

Empirical Analysis of Dimensions of Working Capital Management and Financial Performance

So as to determine the association, dependent variable (operational performance) was regressed against independent variables (inventory management, creditors' management, liquidity management and debtor's management). The results of the regression analysis indicated that there is a weak relationship between operational performance and inventory management, creditors' management, liquidity management and debtors' management practices as evidenced by R square value of 0.103, thus the result established that only 10.3% of the total variation in operational performance was explained by of changes in dimensions of working capital management.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.320	.103	.026	.66194

Analysis of Variance (ANOVA) was performed to test the regression model goodness of fit. The study established that the regression model did not have a goodness of fit as indicated by p-value of 0.268 level of significance. This implies that the regression model was not reliable in establishing the relationship between operational performance and debtor's management practices, liquidity management practices, inventory management practices, creditor management practices of the Kenyan supermarkets. The regression model usually exhibits goodness of fit when the p-value is 5 percent or less, but this one is 26 percent which is more than 5%, as evident in Table 6.

Table 6: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.355	4	.589	1.344	.268
	Residual	20.594	47	.438		
	Total	22.949	51			

The regression coefficients at 95 percent confidence level of debtor's management practices, liquidity management practices, inventory management practices and creditor management practices in supermarket on effect on operational performance of supermarkets in Kenya are shown in Table 4.29.

Table 4: Regression Coefficient of the Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig (P-value).
	B	Std. Error	Beta		
(Constant)	7.107	2.221		3.201	.002
Inventory Management Practices	-.411	.237	-.293	-1.737	.089
Creditor Management Practices	-.581	.319	-.311	-1.818	.075
Liquidity Management Practices	-.100	.233	-.060	-.426	.672
Debtors Management Practices	.209	.304	.099	.688	.495

The study found out that debtor's management practices, liquidity management practices, inventory management practices and creditor management practices did not have a statistically significant effect on the operational performance of supermarkets in Kenya as shown by high p-value of more than 0.05. The p value recorded were as follows: Inventory management (beta of 0.411 with a P-value of 0.089) Liquidity management (beta of 0.100 with a P-value of 0.672) Creditors management (beta of 0.581 with a P-value of 0.075) Debtors' management (beta of 0.209 with a P-value of 0.495). The constant was 7.107 with a p-value of 0.002. This indicates that the constant is significant. The constant value of 7.107 indicates that if debtor's management practices, liquidity management practices, inventory management practices and creditor management practices were absent, the operational performance of supermarkets in Kenya would be 7.107 which is so small, although significant.

Conclusions

As far as inventory management is concerned, the study noted that supermarkets did put in place enough measures to manage lead time for products, reorder levels were managed continuously, overstocking is a common problem leading to too many unmanageable items, and the supermarkets are experiencing increase in cost of holding stock due to unskilled personnel charged with management of inventory.

On credit management, the study revealed that almost all of the supermarkets surveyed did maintain solid accounts payable policy. They always maintained account payables below 50 percent of all debts owed at the end of every month, the supermarkets management tracks number of invoices received and processed daily, the management ensures that average time to approve is favorable to business operations and finally they ensure payment arrangements have low risk for the organization. The question that lingers is: if working capital management issues, which should be directly related with the profitability and other financial performance metrics of grocery stores, are not relevant in addressing operational performance of supermarkets locally, could there be other underlying problems – such as corporate governance challenges; corruption and malfeasance - which could explain the frequent liquidation of supermarkets in Kenya?

As a recommend for practice, supermarket managers should be trained continuously on management of working capital and other related skills. This can be done through video conferencing, zoom, and question answer session with other managers from different fast moving products businesses, visiting other firms, transfers to different supermarkets and other related firms, induction courses, among others. For policy, the government should also get involved in development of supermarkets by also setting aside some funds to support such private firms as supermarkets, involving government accountants in the firms and training employees directly issues related to working capital management. Government should also set rules, procedures and guidance of running the supermarkets and set salary for its employees to prevent mismanagement of funds and under payment of those employees.

Managers should reduce the inventory conversion period by producing and selling goods faster and reducing the receivables collection period by accelerating collections. They also need to invest in their delivery and collection process of their finances a gradual decrease in the amount of inventory, and to be involved in effective planning of the working capital. They should establish the link between effective working capital and improved operational performance, management must commit to developing an understanding in the firm on how working capital management affects operational performance.

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