

**THE RELATIONSHIP BETWEEN WORKING CAPITAL ELEMENTS AND
PROFITABILITY IN KENYAN RETAIL CHAIN STORES: *A CASE STUDY OF*
*UCHUMI SUPERMARKETS***

By

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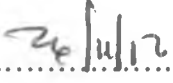
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DECLARATION

This research is my original work and has not been presented to any college or university for the award of a diploma or a degree.

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DEDICATION

This thesis is dedicated to the following: Firstly, to my parents Benter Agwena and my late father Samwel Agwena Masio. Secondly to my loving wife and daughter Hilda W. Masio and Breanna N. Masio respectively. Last but not least to my whole family; their love, support, patience, encouragement and understanding gave me the will and determination to complete this study.

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I wish to acknowledge my sincere appreciation to the following people without whom this research work would not have been successful. It may not be possible to mention all by name but the following were singled out for their exceptional contributions.

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I acknowledge my mum Benter A. Agwena and my deceased father B. Samwel Agwena Masio for their belief in the power of education. Their inspiration made me study hard right when I was young thus sowing the seed of academic excellence at an early age, whose fruits I now enjoy and share with other members of the entire family.

Finally and most importantly, I wish to thank God for bringing me this far. I pride in his name because He means well for me all the time.

ABSTRACT

The purpose of this study was to determine the relationship between working capital elements and profitability of Uchumi Supermarkets; the study further sought to establish the extent to which the various elements of the working capital affected profitability of the firm. The working capital elements that were investigated and analyzed in relation to the performance of the Return on Total Assets (ROTA) which was used as a measure of profitability in this study included total current assets, total current liabilities, total inventory, accounts receivable, accounts payable, current ratio and cash at bank at given end year periods.

This was a case study of the Uchumi Supermarket Limited for the period between 2002-2011. The main source of data was the audited financial statements accessed from the library of Nairobi Securities Exchange at their head office branch located in Nairobi. A time series of the end of year figures of the targeted variables were collected and analyzed by use of the Statistical Package for Social Sciences (SPSS). The findings were presented in tables and graphs.

Major research findings indicated that total current assets, total current liabilities, total inventory, current ratio and cash at bank had a positive correlation with ROTA while accounts receivable and accounts payable had a negative correlation with ROTA. However, only the cash ratio had a significant relationship at 0.01 level of significance. The main conclusion was that Uchumi Supermarkets had poor working capital management practices. The researcher recommends reduction of operational inefficiencies, implementation of robust credit control policy and enhanced leadership and planning of resources.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

A firm is required to maintain a balance between liquidity and profitability while conducting its day to day operations. Liquidity is a pre-condition to ensure that firms are able to meet their short term obligations and continued flow can be guaranteed from a profitable venture (Smith, 1973). The importance of cash as an indicator of continuing financial health should not be surprising in view of its crucial role within the business. This requires that the business must be run both efficiently and profitably. In the process, asset-liability mismatch may occur which may increase firm's profitability in the short run but at a risk of its insolvency.

Too much focus on liquidity will be at the expense of profitability and it is common to find finance textbooks (Gitman, 1984 and Bhattacharya, 2001) begin their working capital sections with a discussion of the risk and return tradeoffs inherent in alternative working capital policies. Thus, the manager of a business entity is in a dilemma of achieving desired tradeoff between liquidity and profitability in order to maximize the value of a firm.

1.1.1 Working Capital Management

Ramachandran & Janakiraman (2009) define working capital as the flow of ready funds necessary for the working of a concern. They go further to explain that it comprises funds invested in current assets, which in the ordinary course of business can be turned into cash within a short period without undergoing diminishing in value and without disruption of the organization.

According to Raheman & Nasr (2007) working capital management is a very important component of corporate finance because it directly affects the liquidity and profitability of a company. They explain that it deals with current assets and current liabilities. Working capital management is important for many reasons: Firstly, the current assets of a typical manufacturing firm accounts for over half of its total assets and for a distribution company, they account for even more. Excessive levels of current assets can easily result in a firm realizing a substandard return on investment. Smith (1973) states that firms with too few current assets may incur shortages and difficulties in maintaining smooth operations hence efficient working capital management involves planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet due short term obligations on one hand and avoid excessive investment in these assets on the other hand. Working capital management is the managerial decision on the selection of optimal levels of inventory, cash, trade receivables and payables with a view to achieving profitability and strengthening the liquidity of the firm (Saccurato, 1994). It refers to short term decisions by looking at how firms ensure that they have enough cash to pay their bills and how they manage short term assets and liabilities meaning that working capital is therefore a measure of a firm's efficiency as well as its short term financial stability.

The term working capital originated with the old Yankee peddler, who would load up his wagon with goods and then go off on his route to peddle his wares. The merchandise was called working capital because it was what he actually sold, or 'turned over', to produce profits. The wagon and the horse were his fixed assets. He generally owned the horse and the wagon, so they were financed with 'equity' capital, but he borrowed the funds to buy merchandise. These borrowings were called working capital loans, and they had to be repaid after each trip to demonstrate to the bank that the credit was sound. If the peddler was able to repay the loan, then the bank would make another loan, and banks that followed this

procedure were said to be employing “sound banking practices”, (Brigham and Houston, 2004).

Efficient working capital management involves planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet due short term obligations on the one hand and avoid excessive investment in these assets on the other hand, (Eljelly, 2004 as cited in Raheman and Nasr, 2007). According to Pandey (2004), working capital has two broad concepts: gross working capital and net working capital. Of the two concepts, net working capital is of great significance to a business since it affects the liquidity and profitability of the company.

1.1.2 The Kenyan Retail Chain Sector

According to an article by Wasike (2012), Kenya’s retail chain market is dominated by Nakumatt which has 30 branches, Tuskys with 32, Uchumi with 18 and Naivas with 19 branches. It is important to note that Uchumi has the highest market share in terms of profitability at 38%. While the supermarket as a concept is not new to Kenya (the first supermarkets arose in the 1960s), their rapid growth to market dominance is a very recent phenomenon, having taken off since the mid-1990s. Self-service stores in general and supermarkets in particular have popped up all over the country with the current count standing at around 400 supermarkets. In the main urban areas we find the larger format supermarkets and the larger chains. In the smaller towns and main cross-road towns, smaller format stores and smaller chains have emerged.

The two clear market leaders are Uchumi and Nakumatt, both large domestic-capital chains who together represent 65% of the supermarket sector. With the supermarket sector growing fast and showing no signs of slowing down, growth has mostly been organic rather than through the acquisition of small chains or independent stores by large chains. Supermarkets in Kenya are no longer the niche players catering exclusively to the high income consumers

in the capital they were once were. They have moved into intermediate cities and now rapidly expanding into smaller towns. It is important to note that Kenya is also displaying clear signs of continued rapid expansion of supermarkets among the middle and low income consumers.

Emerging evidence indicated that while the relatively large high-income Asian/White/Expatriate segment of the population has played an important part in providing a nucleus from which supermarkets have been able to arise, supermarkets have moved well beyond these segments. The appearance smaller supermarket chains such as Tuskys, Naivas and Ukwala near busy bus stops used by the middle and low income consumers in Nairobi and other towns and the opening of Uchumi and Nakumatt in Nairobi's middle-income neighborhoods (Wekesa, 2012)

According to an article by Masika (2011), the growth of Kenya's supermarket has also taken a regional character with outward Foreign Direct Investment (FDI) facilitated by regional investment regulations liberalizations. Uchumi opened its first branch outside Kenya in Kampala (Uganda) in December 2002. From their regional expansion plans for the next five years, it appears this is just the first drop of an upcoming flood of outward FDI by Kenya supermarkets. Nakumatt plans to open branches in Uganda, Tanzania, Rwanda, Zambia and Zimbabwe; Uchumi's expansion plans include stores in Tanzania and Rwanda as well as stores in Uganda.

1.1.3 Uchumi Supermarket

Uchumi is a public limited company incorporated in 1975 under Kenya's Companies Act, its main objective is to have an enterprise for equitable distribution of essential commodities at affordable prices while an outlet for the local manufacturers. In the 1990s Uchumi spearheaded the hypermarket concept in Kenya. The introduction of the hypermarket concept and specialty shops has been a runaway success. Uchumi places inordinate emphasis on the value of continuous training and concern with staff-customer relations. The key ingredient of Uchumi's runaway success was a keen focus on the buying culture of Kenyan shoppers, close working relations with suppliers and good management-staff relations (Uchumi website, 2012)

In early 2000 Uchumi started experiencing financial and operational difficulties occasioned by a sub-optimal expansion strategy coupled with weak internal control system. This resulted in a marked diminution of the company's resources which culminated in its inability to meet its obligations on an ongoing basis. As a result, on 31st May 2006, the board of directors resolved that the company ceases operations and on 2nd June 2006, the Debenture holders placed the company under receivership. Simultaneously, the Capital Markets Authority (CMA) suspended the company's listing on the Nairobi Stock Exchange (NSE). Following a framework agreed between the Government of Kenya, Suppliers and Debenture holders, that the company is revived and commence operations from 15th July, 2006 under Specialized Receiver Manager (SRM) and Interim Management.

The management and staff have since worked tirelessly to redeem the company from a negative bottom line since 2006; the company has reported profits in the last three financial years. The lending banks in turn lifted the company's receivership in 2010 and the company was successfully re-listed on the NSE on 31st May 2011 exactly five years to the date it was

suspended. The company is indebted in gratitude to the government, lending banks, suppliers, customers and shareholders for their support and commitment to saving one of Kenya's oldest strongest brands (Wekesa, 2012)

1.1.4 Retail Chain Sector in Other Countries

Worldwide, supermarkets have been characterized by competition for bigger market share. In Africa, South Africa leads with the highest concentration of Supermarkets, to an extent the growth in supermarkets in the Southern African Region is largely driven by South Africa. In deed Shoprite with staff of over 95,000 and 1220 stores and a turnover of over USD 5 Billion (Shoprite Website, 2012) is probably the largest supermarket in Africa. The chains expansionist strategy has led to the sector growth in many countries. Cape Town's Pick 'n' Pay supermarket spent \$13M to raise its stake to 49% from 25% in Zimbabwe's largest grocer TM Supermarkets (Robinson, 2011)

Dijkstra (1997) stated that the approach to business is differentiated by the products offered and the target market. Boxer Superstores for instance, has invested in shopper loyalty programmes while Cambridge Supermarket specializes in culturally appropriate choice of fresh produce and fresh meat. Shoprite Holdings Limited targets the more affluent clientele. While most supermarkets in South Africa are listed on the Johannesburg Stock Exchange, some others like Pick n Pay supermarkets are a family controlled business. Woolworth Supermarkets is South Africa's leading retail chains – a benchmark for excellence and an icon of quality and is known to provide customers with superior quality merchandise at reasonable price.

In the UK Supermarket sector, the four biggest supermarket chains are Tesco, ASDA, Sainsbury and Morrison's and they account for 67.9% of the market. Tesco has 28% market share, ASDA has 15.2%, Sainsbury has 14.3% and Morrison's has 10.4% (Emma, 2010). In general UK Supermarket sector has been increasing stably, for example, the total grocery market grew from Pounds 93.3 billion in 2000 to Pounds 146.3 billion in 2010. However in recent years, UK grocery market has faced more and more uncertainties such as the financial crisis, high unemployment, and tight household budgets and so on. Although UK supermarket sector could not completely get rid of the impacts of those uncertainties, it still acquired reasonable growth.

Several authors are in agreement that supermarkets are faced with various challenges such as stiff competition, unresponsive policies in management of working capital and indeed a reduction in profit margins. Rising operating costs coupled with reduced profit margins present a challenge to many supermarkets. To safeguard themselves against the hostile environment, supermarkets must define ways to gain competitive advantage (Humphreys, 2003) through product and cost strategies. Some of the ways of having a viable supermarket store is by ensuring that there is in place a well designed working capital policies that will ensure profitability for the supermarket, the other is for the managers to source for fast moving products with huge discount tag or lower per unit costs. Thus the value chain adapted must take into account some of the challenges facing the supermarkets and respond to the challenges including costs mitigation and superior products (Henson et al, 2008)

1.2 Empirical Studies on the Relationship between Working Capital Management Variables and Profitability

Many researchers in the past have studied the relationship between working capital management, profitability and liquidity of various firms and they have provided evidence to support their findings. All firms should address the issue of working capital very seriously. Given their vulnerability to a fluctuation in the level of working capital, they cannot afford to starve of cash. The study undertaken by Peel et al., (2000) revealed that some firms tend to have a relatively high proportion of current assets, less liquidity, exhibit volatile cash flows, and a high reliance on short-term debt. The recent work by Howorth and Westheat (2003), suggest that some companies tend to focus on certain areas of working capital management where they can expect to improve marginal returns. For other growing businesses, an efficient working capital management is a vital component of success and survival; i.e. both profitability and liquidity (Peel and Wilson, 1996)

Raheman and Nasr (2007) took a sample of Pakistani Firms listed on the Karachi Stock Exchange between 1999 – 2004 to study the effect of different variables of working capital management such as the average collection period, inventory turnover in days, average payment period, cash conversion cycle and current ratio, on the net operating profitability. They recognized that most of these firms had large amounts of cash invested in working capital and as such management of the working capital had a significant impact on their profitability. They concluded that there was a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion cycle for these firms. Their findings suggested that managers could create value for their shareholders by reducing the number of day's accounts receivable and inventories to a reasonable minimum. The negative relationship between accounts payable and profitability was consistent with the view that less profitable firms wait

longer to pay their bills. They further concluded that if the firms managed their working capital in more efficient ways this would ultimately increase profitability of their companies.

Shin and Soenen (1998) researched the relationship between working capital management and value creation for shareholders. The standard measure of working capital management was the cash conversion cycle but in their study they used net-trade cycle (NTC) as a measure of working capital management. NTC is basically equal to the cash conversion cycle where all the three components are expressed as a percentage of sales. They used a sample of 58,985 firms in the period 1975 – 1994 where they found a strong negative relationship between the length of the firms' NTC and their profitability. Based on their findings they suggested that one possible way to create shareholder value was to reduce the firms' NTC.

To test the relationship between working capital management and corporate profitability, Deloof (2003) used a sample of 1,009 large Belgian non-financial firms for the period 1992 – 1996. By using correlation and regression tests he found a significant negative relationship between gross operating income and the number of days accounts receivable, inventories and accounts payable of Belgian firms. Based on the study results, he suggested that managers can increase corporate profitability by reducing the number of days accounts receivable and inventories.

Mathuva (2009) examined the influence of working capital management components on corporate profitability by sampling 30 firms listed on the Nairobi Stock Exchange for the period 1993 – 2008. He concluded that there existed a highly significant negative relationship between the time it took for firms to collect cash from their customers and profitability. This meant that more profitable firms took the shortest time to collect cash from their customers. This finding was similar to that of Raheman and Nasr (2007). However, he

differed with Raheman and Nasr (2007) when he further concluded that there existed a highly significant positive relationship between the period taken to convert inventories into sales, the time taken to pay creditors and profitability. This implied that the longer a firm took to pay its creditors the more profitable it was. Firms were therefore capable of gaining sustainable competitive advantage by means of effective and efficient utilization of their resource through a careful reduction of the cash conversion cycle to its minimum and in so doing the profitability of the firms would be expected to increase.

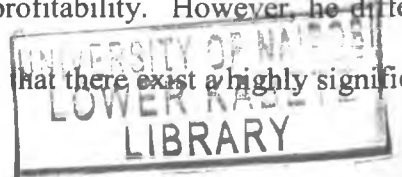
Kiprono (2004) studied the relationship between cash flows and earnings performance measures for companies listed in the Nairobi Stock Exchange (NSE). His objective was to determine the relationship between return on assets (ROA), return on equity (ROE), and return on net assets (RONA) against the cash flows of firms. To achieve this, regression analysis was employed on thirty companies listed at the NSE. The companies were picked randomly and were analyzed for the five year period between 1998 and 2003.

He concluded that there is a positive or direct association between cash flows from operating activities and all the return performance indicators. The results also showed that there is a negative or indirect association between cash flow from financing and investing activities and returns performance indicators. On overall, there is a weak relationship between cash flows and performance indicators. However, he noted that it is important to determine the impact of firm size in cash flow and earnings performance indicators.

1.3 Statement of the Problem

For firms to be profitable they should aim at optimizing their investment in current assets and current liabilities avoiding either excessive or inadequate investment in such assets. If the amount of working capital is excess it could weaken the firm's profitability, while inadequate investment in working capital may expose the firm to bankruptcy. According to Raheman and Nasr (2007) the ultimate objective of any firm is to maximize the profit. But, preserving liquidity of the firm is an important objective too. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm. Therefore, there must be a tradeoff between these two objectives of the firms. One objective should not be at the cost of the other because both have their importance. If we do not care about profit, we cannot survive for a longer period. On the other hand, if we do not care about liquidity, we may face the problem of insolvency or bankruptcy. Therefore the dilemma here is seeking to strike a trade-off between the profitability and liquidity without the risk of either tying too much cash in working capital while at the same time not risking having no stock. This study focuses on the relationship between working capital management variables and profitability of Uchumi Supermarkets, its seeks to discover whether the management of working capital is indeed a factor in the retail chains turnaround that has resulted in the profitability in the period between 2008- 2011 and whether Uchumi's difficult trading periods could have been partly attributed poor working capital management practices.

Mathuva (2009) examined the influence of working capital management components on corporate profitability by sampling 30 firms listed on the Nairobi Stock Exchange for the period 1993 – 2008. His findings were similar to Raheman and Nasr (2007), when he concluded that there existed a highly significant negative relationship between the time it took for firms to collect cash from their customers and profitability. However, he differed with Raheman and Nasr (2007) when he further concluded that there exist a highly significant



positive relationship between the period taken to convert inventories into sales, the time taken to pay creditors and profitability.

Gill et al (2010) researched the relationship between working capital management and profitability by taking a sample of firms listed on New York Stock Exchange for a period of three years from 2005 to 2007. Though they found a negative correlation between credit period granted to customers and profitability, they found no statistically significant relationship between the average number of days the inventory is held.

From the foregoing therefore, it is apparent that the above studies are yielding significant consistencies in terms of how working capital elements relate to the profitability of the firm despite the firms belonging to different sectors. These results could be significant to our study as results yielded by our study could reinforce the optimum levels of working capital needed for profitability to be realized.

Though there has been extensive studies on the relationship between working capital elements and profitability of various industries in various markets across the globe; there has been no particular study targeting retail chain stores and in particular the Kenyan retail stores. This study therefore focuses on the relationship between working capital elements and profitability of Kenyan retail chain stores and seeks to ascertain whether the management of working capital is indeed a factor in the retail chains turnaround that has resulted in profitability in the last three financial periods. Therefore, the study shall seek to answer the question; what is the relationship between profitability and working capital elements at Uchumi Supermarkets?

1.4 Research Objectives

The objective of this study is to determine the relationship between the Working Capital Management variables and profitability of Uchumi Supermarkets, this study would further establish the extent to which the various elements of the working capital affect profitability of the firm.

1.5 Importance of the Study

This study will be of added value to firms and specifically those firms which have a lot of transactions in working capital and in the process tying a lot of cash in either inventories or receivables. The findings will equip profit making organizations with tools for effective management of working capital and growth in profitability and best funding options for the organization for both short term and long term obligations.

Firms will thus benefit from this study in that they will get equipped with skills to improve profitability and best capital funding strategies. The study will be of interest to practicing finance officers and accountants of firms as well as top and middle level managers. In addition this study will add to the body of knowledge in that it can be made available to university libraries to aid further academic research in this field.

This study will also be important to the retail chain stores and more so Uchumi as it will be seeking to discover how well they can optimize the working capital components to achieve profitability; to establish which components are important for an organizations performance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The working capital meets the short-term financial requirements of a business enterprise. It is a trading capital, not retained in the business in a particular form for longer than a year. The money invested in it changes form and substance during the normal course of business operations. The need for maintaining an adequate working capital can hardly be questioned. The success of a firm depends ultimately, on its ability to generate cash receipts in excess of disbursements.

2.2 Theoretical Framework of Working Capital Elements

The cash flow problems of many businesses are exacerbated by poor financial management and in particular the lack of planning cash requirement (Jarvis et al, 1996), therefore there has to be an optimum level of working capital that has to be maintained for profitability to be attained which is the essence of this study.

Khan and Jain (2004) stated that the goal of working capital management is to manage the firm's current assets and liabilities in such a way that a satisfactory level of working capital is maintained. This is so because if the firm cannot maintain a satisfactory level of working capital, it is likely to become insolvent and may even be forced into bankruptcy. The current assets should be large enough to cover its current liabilities in order to ensure a reasonable margin of safety. Each of the current assets must be managed efficiently in order to maintain the liquidity of the firm while not keeping too high a level of any one of them. Each of the short-term sources of financing must be continuously managed to ensure that they are obtained and used in the best possible way. The interaction between current assets and current liabilities is therefore, the main theme of the theory of working management. The

basic ingredients of the theory of working capital management may be said to include its definition, need, optimum level of current assets, the trade-off between profitability and risk which is associated with the level of current assets and liabilities, financing- mix strategies and so on.

While the performance levels of businesses have traditionally been attributed to general managerial factors such as manufacturing, marketing and operations, working capital management may have a consequent impact on businesses survival and growth (Kargar and Blumenthal, 1994). The management of working capital is important to the financial health of all businesses. The amounts invested in working capital are often high in proportions to the total assets employed and so it is vital that these amounts are used in an efficient and effective way. However, there is evidence that some businesses are not very good at managing their working capital. Given that many businesses suffer from undercapitalization, the importance of exerting tight control over working capital investment is difficult to overstate.

A firm can be very profitable, but if this is not translated into cash from operations within the same operating cycle, the firm would need to borrow to support its continued capital needs. Thus, the twin objectives of profitability and liquidity must be synchronized and one should not impinge on the other for long (Peel, 1996). Investments in current assets are inevitable to ensure delivery of goods or services to the ultimate customers and a proper management of same should give the desired impact on either profitability or liquidity. If resources are blocked at the different stage of the supply chain, this will prolong the cash operating cycle. Although this might increase profitability (due to increase sales), it may adversely affect the profitability if the costs tied up in working capital exceed the benefits of holding more inventory and/or granting more trade credit to customers.

Another component of working capital is accounts payable, but it is different in the sense that it does not consume resources; instead it is often used as a short-term source of finance. Thus it helps to reduce its cash operating cycle, but it has an implicit cost where discount is offered for early settlement of invoices.

2.3 Working Capital Policies

Different companies adopt different policies concerning management of working capital. As in most areas financial management, some companies adopt very aggressive policies, some adopt very conservative policies and some try to follow a middle-of-the-road approach.

2.3.1 Aggressive Approach

According to Filbeck and Krueger (2005), an aggressive approach to managing current assets usually implies holding minimum levels of current assets; this risk oriented approach, it is hoped, will produce greater returns for the company. For example, by holding minimum levels of cash in non-interest-bearing accounts or minimum levels near-cash assets, the company may hope to earn greater returns by investing in long-term investment vehicles, which typically earns higher yields. The company may also be investing more in long-term productive assets again hoping for more dramatic returns over the long run. This aggressive current assets management policy, however, is associated with substantial risks; by holding levels of cash and near-cash asset, there is a risk that the company will not have adequate cash on hand to meet its short-term obligations when they are due.

Likewise, Weinraub and Vissecher (1998) in their study showed that if a company holds minimum inventory levels, another aggressive approach, there is a risk that stock outs will result and the sales will be lost due to shortage of inventory on hand. This is especially true in retail chain industry. By holding minimum inventory levels, however, the company hopes to reduce the expenses associated with carrying inventory, such as storage and handling costs,

insurance, and even inventory shrinkage caused by damage or theft. In this way, greater return, or profit would be earned.

In a regional study, Pandey and Parera (1997) showed that an aggressive approach to managing current liabilities usually implies using the maximum amount of short-term debt relative to long-term debt, under the generally valid assumption that short-term debt will be less expensive thereby increasing returns by lowering costs. The risk however, is two-edged: first, there is the risk that the company will not be able to “roll over” or refinance, its short-term debt when it comes due, second, there is the risk that interest rates will rise and new short-term debt will be more costly. Additionally, it has been demonstrated that short-term interest rates are generally more volatile than long-term rates and so are more subject change during the short-term period.

2.3.2 Conservative Approach

On the other hand, a conservative approach to managing current assets implies holding excess cash balances and excess inventory levels. In this way, cash will be adequate to meet any unexpected liquidity needs and inventory levels will sufficient to avoid stock outs. As a result, however, greater returns are usually sacrificed. A conservative approach to managing current liabilities implies financing both short-term and long-term needs with long-term financing and keeping current liabilities to a minimum (Soenen, 1993). In this way, financing at a fixed rate for longer periods guarantees that funds are available, although probably at higher cost. Additionally, there will be periods when the company is paying interest on financed funds that are not needed at that particular time.

2.3.3 Middle-of the-Road Approach

A middle-of-the road approach to working capital policy can be summarized by the matching principle, which states that long-term or permanent assets should be financed by long-term or permanent sources and short-term assets should be financed by short-term sources (Jose et al.

1996). Some level of current assets, such as account receivable and inventories will always be acquired for corporate needs. These are referred to as permanent current liabilities. Therefore, working capital policy must also concern itself with the permanent levels of current assets and current liabilities, which, for financing purposes, are treated as though they represented long-term assets and long-term liabilities.

Chu et al. (1991) however reiterated that in periods of high uncertainty, especially with regard to interest movements, it would seem that a middle-of-the road policy is wise. Once the general trend of interest rate movement is ascertained, a greater reliance on either short-term or long-term financing sources can be implemented. In any event a company either an aggressive or a conservative working capital policy should be well aware of its policy decisions and of the implications and risks involved and should be ready to adapt working capital policies to changes in the financial environment.

2.4 The Cash Conversion Cycle (CCC)

2.4.1 The Cash Conversion Cycle Model

In an effort to determine the optimal cash balance that a firm should maintain for transaction demand, a number of models have been brought forward, notably the Cash Conversion Cycle Model. Brigham and Houston (2004) states that the cash conversion cycle focuses on the length of time between when the firm makes payments and when it receives cash inflows.

A shorter cash conversion cycle would lead to profitability of the firm but the firm has to exercise caution to avoid negative effects on the firm's other operations. The cash conversion cycle can be shortened by reducing the inventory conversion period and accounts receivable collection period and by lengthening the payables deferral period.

2.5 Models for Determining Optimum Cash Holdings

Constant pressure to increase return on assets has resulted in firms seeking ways to reduce their working capital costs. In the cash management area, firms are employing more sophisticated collection and disbursement systems. Cash management systems today efficiently speed up collections and, at the end of the day, sweep excess balances into money market accounts. Cash managers focus on finding the optimal cash-short-term investment mix (Weinraub & Visscher, 1998). In an effort to determine the optimal cash balance that a firm should maintain for transaction demand, a number of models have been brought forward notable among them are the Baumol and Miller- Orr models of cash management.

2.5.1 Baumol Model

Baumol Model of cash management provides a formal approach for determining a firm's optimum cash balance under certainty. It considers cash management similar to an inventory management problem. As such, firms attempt to minimize the cost of holding cash and the cost of converting marketable securities to cash. This model makes the following assumptions: that the firm is able to forecast its cash needs with certainty; the firm's cash payments occur uniformly over a period of time; the opportunity cost of holding cash is known and it does not change over time; and the firm will incur the same transaction cost whenever it converts securities to cash (Weinraub and Visscher, 1998)

2.5.2 The Miller- Orr Model

A limitation of the Baumol model is that it does not allow cash flows to fluctuate. Firms in practice do not use their cash balance uniformly nor are they able to predict daily cash inflows and outflows. The Miller-Orr model overcomes this shortcoming and allows for daily cash flow variation. It assumes that net cash flows are normally distributed with a zero value of mean and standard deviation.

2.6 Working Capital Variables and Profitability

Uchumi supermarket has emerged as the most efficient supermarket chain in the country with the lowest cost of operations. The efficiency resulted mainly from the prudent management of its resources including the working capital which forms a big part of its assets (Kestrel Report, 2012)

“Our investment case is informed by the company’s cautious expansion strategy in East Africa which will see a three year compounded annual growth rate of 26.7% of revenues occasioned by increased operating efficiencies” said the investment bank

It further reported that the supermarket chain’s operating margin was highest at 4.8% compared to Nakumatt’s 2.6%, Tusky’s 1.7% and Naivas’s 1.1% and this means that its profit from business operations is the highest as compared to other three supermarket chains. The investment bank said the supermarket chain also has the highest net profit margin which is a measure of its net profit to sales meaning it is more profitable as compared to the other three.

“Locally, Uchumi comes out as the most cost efficient retail chain and has the strongest net profit margin at 3.6% compared to Nakumatt at 0.8%, Tuskys at 1.3% and Naivas at 0.8%” said the investment banker.

Uchumi results indicated that profit for the period ending Dec. 31st 2011 rose to sh. 204 million or 24% as compared to the previous period while revenues grew to sh. 7.5 billion from sh. 5.85 billion, a 29% increase. The investment bank is expecting the supermarket chain, which last year opened branches in Uganda bringing its total to 21, to grow as infrastructure across the country improves and economic activity increases. Uchumi shareholders could receive a dividend as early as next year as the board of the retail chain

moves to discuss sharing of profits with investors after a 10-year freeze (Kestrel Report, 2012)

“The board is expected to deliberate on dividend matters very soon and at the moment I cannot pre-empt what its intentions are,” said Mr. Jonathan Ciano, the CEO of Uchumi supermarkets in an interview with the Business Daily

“In the year 2012 which ends in three months we would not have paid dividend because it has not been declared as such” Mr. Ciano said.

Stock brokerage firm Kestrel capital forecasted that the chain could pay a dividend of sh. 0.50 in 2013 and sh. 1 in 2014.

“Profitability while being one of the criteria in crafting a business dividend policy going forward, the state of the economy (borrowing costs), and reserves going forward and the growth determination of the board play a part in the subject,” said Ciano.

Resumption of the dividend payment is set to calm the nerves of Uchumi shareholders who have seen their shares fall to sh. 7.60 from sh. 13.75 when it re-listed on May 31st 2012 reflecting a drop of 47%. Analysts reckon that the share is set to recover on the strength of its expansion plans and expected revenues. The retailer plans to open more stores in Kenya, expand to Uganda and Tanzania to help it double its market value within two to three years.

These excerpts indicate that there are working capital elements that affect the profitability within the retail chain stores, these will intern result into smaller or bigger market share, return or value for the shareholders and generally impact negatively or positively on the success or otherwise of the firm. This further emphasizes that optimization and composition of the working capital is important towards the firms’ profitability which is the subject of this study.

2.7 Measures of Working Capital and Profitability

Table – 1 below indicates the variables of Working Capital Management and Profitability and their respective measures. Raheman in his study undertaken in 2007 on the Working Capital Management and Corporate Performance of Manufacturing Sector in Pakistan used similar variables. Mustafa (2003) in his analysis of the impact of Working Capital on the profitability of SMEs in Pakistan also used largely most of the variables and measurements in this table.

Table 2.7 Below indicates Variables and Measures of Working Capital and Profitability

VARIABLE	MEASUREMENT	ABBREVIATION
Return on Capital Employed	Operating Profit Before Tax/Total Assets	ROCE
Receivable Days	Accounts Receivables/Net Sales*365	RD
Inventory Days	Inventory/Cost of Goods Sold*365	ID
Payable Days	Accounts Payable/Purchases*365	AP
Cash Conversion Cycle	RD+ID-AP	CCC
Account Payables to Total Current Assets Ratio	Account Payables/Total Current Assets	APTCA
Financial Debt Ratio	Total Financial Debt/Total Assets	FDR
Current Ratio	Current Assets/Current Liabilities	CR

Source: Raheman & Nasr (2007)

The table above shows the variables of the working capital that would determine the profitability of the firm and how the variables are measured. The degree by which the variables will affect a firms' profit varies from one sector to the other but for purposes of this study, the variables will be subjected to a hypothetical tests using a selected methodology to determine the degree by which they affect a firms profitability; this will then be used to make recommendations on the optimum levels and the composition that would ensure profitability and liquidity of a firm.

2.8 Summary

Various studies have been carried out on the relationship between working capital elements and profitability of firms in the Nairobi Stock Exchange but none on supermarkets in Kenya. This study seeks to find out if there is a relationship between working capital management and profitability of an organization and the components of the working capital that will affect a firm's profitability especially within the retail chain stores sector.

Working capital is therefore an important part in the firm financial management decision. The ability of the firm to continuously operate in longer period depends on how they deal with investment in working capital management which this study is seeking to undertake. The optimal working capital could be achieved by firms that manage the trade-off between profitability and liquidity. It has been seen that if a company has got over working capital, the company profitability decreases or if a company has got less working capital, because of a greater risk, the company can't pay its debts and the trade-off is therefore necessary.

It is important to note that various studies have also indicated that working capital optimum levels that would yield profitability would vary from one sector to the other and from one industry to the other. Therefore, this study will be very important in establishing the optimum

levels that would be relevant to the retail chain sector; this will also help determine those elements of working capital that the management of a retail chain should always be putting a keen eye on.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter outlines the overall methodology used in the study. This includes the research design, population of study, data collection methods, research procedures and data analysis and presentation.

3.2. Research Design

Research design is the plan and structure of investigation so conceived as to achieve the objectives of the study. The research was conducted through a case study. This design was adopted because of the one unit of study: Uchumi Supermarkets. The case study design was found appropriate for carrying out a holistic, in depth and comprehensive assessment where much emphasis was placed on an evaluation of the relationship between profitability and working capital elements at Uchumi Supermarkets.

3.3. Population

This case study on Uchumi supermarket was considered a representative study on the Kenyan retail chain since it is the only publicly listed retail chain. Uchumi Supermarket is the only publicly listed retail chain store in Kenya and results of the study would be assumed to be representative of the retail chain stores in Kenya. The results would then be compared to the results of similar studies in other countries done in South African's and U.K's listed retail chain stores such as Tesco to find any consistency in the results.

3.4. Data collection

The researcher collected quantitative data from secondary sources including published audited financial statements from the website of Uchumi Supermarkets Limited and from Uchumi’s Head office. The data consisted of statistics on working capital elements such as total current assets, total current liabilities, total inventory, accounts receivable, accounts payable, current ratio, cash at bank and Return on Total Assets (ROTA) which in this study in the measure of profitability. The audited financial statements were accessed from the library of Nairobi Securities Exchange. The data was recorded on an excel spreadsheet and was for a period of 10 years from 1st January 2002 to 31st December 2011.

3.5. Data analysis

The researcher will ensure that information is captured and analyzed using SPSS. Multiple Regression Analysis will be used to analyze the data.

The regression equation will be of the form:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \varepsilon)$$

Where:

Y is Return on Total Assets calculated at each financial year end

X₁ is the Total Current Assets at each financial year end

X₂ is Total Current Liabilities at each financial year end

X₃ is Total Inventory

X₄ is Accounts Receivable which shows debtors at each financial year end

X₅ is Accounts Payable which shows creditors at each financial year end

X₆ is Current Ratio calculated at each financial year end

X₇ is Cash at Bank which shows the bank balances at each financial year end

$\beta_0, \beta_1, \beta_2, \dots, \beta_7$ are coefficients

The basis of the model was the finding by Raheman & Nasr (2007) who held that variables of the working capital elements would determine the profitability of the firm and that the degree by which the variables will affect a firms' profit varies from one sector to the other. In this model, all the variables, except current ratio, will be in absolute figures. As a result, the Current Ratio performance against the dependent variable (ROTA) was evaluated separately from the other variables. In conclusion, the results of this study showed the optimum levels of the variables attained and the elements that greatly influenced the profitability at Uchumi Supermarkets Limited.

The period during which Uchumi ceased its operations on 31st May 2006 to when it commenced its operations on 15th July 2006 was considered to be a short to affect the results of the study compared to the 10 year period within which the study was undertaken. Therefore this period of closure is not reflected in the variable for analysis.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSIONS OF FINDINGS

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The study findings are presented as an evaluation of the relationship between working capital elements and profitability at Uchumi Supermarkets Limited. The data was gathered exclusively from the audited financial statements being the source of secondary data in line with the objectives of the study.

4.2 Descriptive Statistics

Table 4.2 Working Capital Elements and Return on Total Assets (ROTA) Performance

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Total Current Assets	10	676453	1397650	1055998.8	214295.4049
Total Current Liabilities	10	1123000	1849050	1437246.1	208078.902
Total Inventory	10	307950	758002	578771	148818.5316
Accounts Receivable	10	111234	501234	260840.6	109073.9647
Accounts Payable	10	568120	1308200	1043579.9	216145.7718
Current Ratio	10	0.43	0.99	0.743	0.162689206
Cash at Bank	10	13612	234000	115940.6	79044.99456
ROTA	10	-0.27	0.16	-0.0085	0.13482602

The findings indicated that during the period between 2002-2011 Uchumi Supermarkets Limited maintained average total current assets worth Kes1, 055,998,800. The minimum current assets were Kes676,453,000 while the maximum current assets stood at Kes1,397,650,000. The standard deviation was 214295.4049 indicating that the current assets fluctuated highly during the period under study. On the other hand the average total current liabilities were Kes1,437,246,100 where the minimum amount was Kes1,123,000,000 and the maximum Kes1,849,050,000. The standard deviation was 208078.902 indicating that the fluctuation of total current assets was significantly high. In the same vein the current ratio of

Uchumi Supermarket had a mean of 0.743 with a minimum of 0.43 and a maximum of 0.99 and a standard deviation of 0.162689206. This indicated that the company operated with a current ratio below 1 for the entire period of study. The mean inventory was kes578,771,000 with a minimum of Kes307,950,000 and maximum of Kes758,002,000 and a standard deviation of 148818.5316. This indicated that the inventory levels fluctuated highly during the period of study.

Accounts receivable had a mean of Kes260,840,600 with a minimum of Kes111,234,000 and a maximum of Kes501,234,000. The standard deviation was 109073.9647 implying that accounts receivable fluctuated significantly during the period of study. On the other hand, accounts payable had a mean of Kes1,043,579,900 with a minimum of Kes568,120,000 and a maximum of Kes1,308,200,000. The standard deviation was 216145.7718 also indicating high fluctuation rates during the period of study.

The cash at bank averaged Kes115,940,600 and oscillated between a minimum of Kes13,612,000 and a maximum of Kes234,000,000 with a standard deviation of 79044.99456. This indicated a high fluctuation of cash at bank during the study period. Finally, the ROTA averaged -0.0085 and oscillated between a minimum of -0.27 and a maximum of 0.16 with a standard deviation of 0.13482602. This indicated that the ROTA fluctuated between positive and negative territory during the study period.

Figure 4.2.1 Working Capital Elements Performance

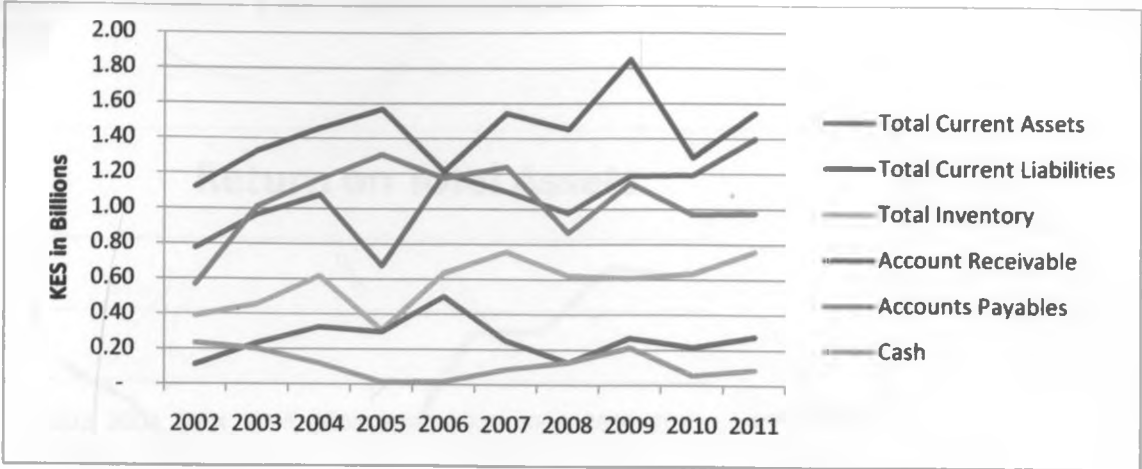


Figure 4.2.2 Current Ratio Performance

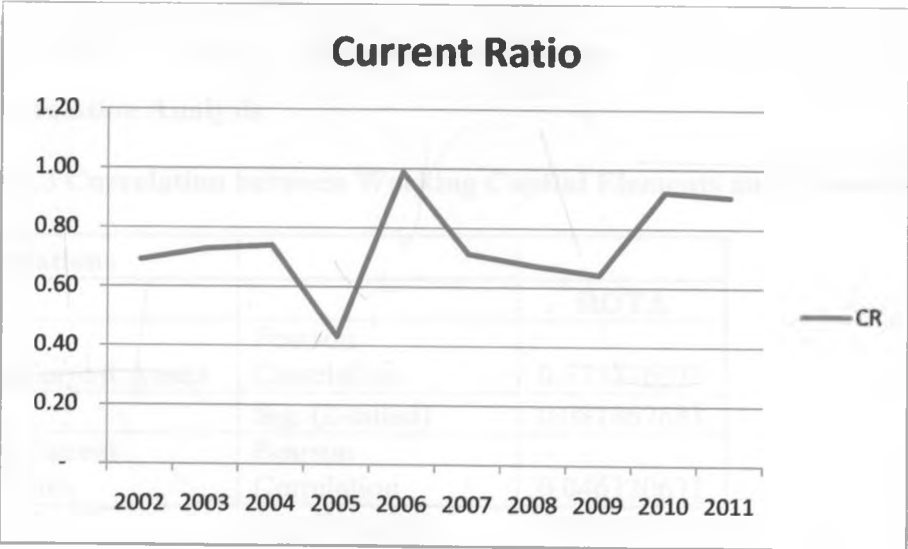
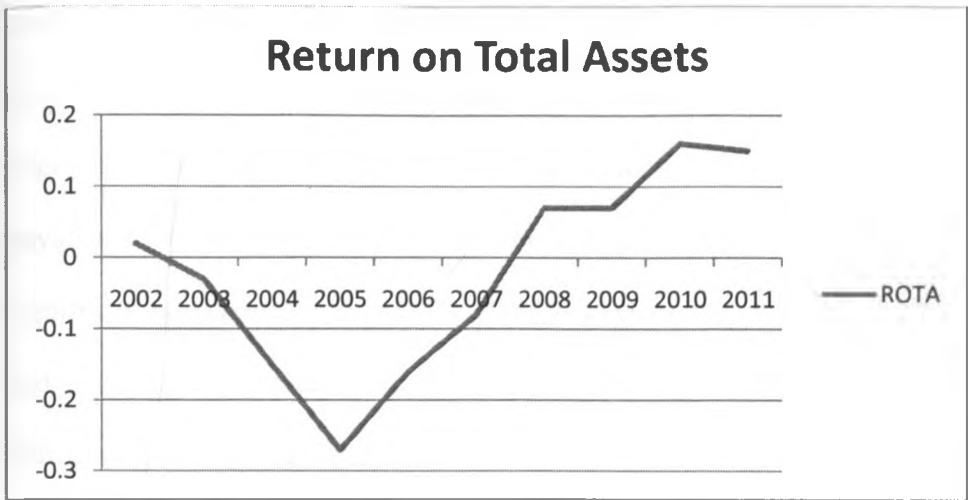


Figure 4.2.3 Return on Total Assets Performance



4.3 Correlation Analysis

Table 4.3 Correlation between Working Capital Elements and Return on Total Assets

Correlations		ROTA
Total Current Assets	Pearson Correlation	0.575276373
	Sig. (2-tailed)	0.081867681
Total Current Liabilities	Pearson Correlation	0.046320631
	Sig. (2-tailed)	0.898890746
Total Inventory	Pearson Correlation	0.499655163
	Sig. (2-tailed)	0.141431734
Accounts Receivable	Pearson Correlation	-0.49094305
	Sig. (2-tailed)	0.149623194
Accounts Payable	Pearson Correlation	-0.555996168
	Sig. (2-tailed)	0.095133844
Current Ratio	Pearson Correlation	0.946045394
	Sig. (2-tailed)	0.00873775
Cash at Bank	Pearson Correlation	0.412222811
	Sig. (2-tailed)	0.236501978
**Correlation is significant at the 0.01 level (2-tailed).		

The findings indicated that at Uchumi Supermarkets during the period 2002-2011 the working capital elements that had a positive correlation with the ROTA included total current assets at 0.58 (2dp), total current liabilities at 0.05 (2dp), total inventory at 0.50(2dp), current ratio at 0.95(2dp) and cash at bank at 0.41(2dp). The working capital elements with a negative correlation with ROTA included accounts receivable at -0.49 (2dp) and accounts payable at -0.56 (2dp). Notably, all the elements except the current ratio did not have a significant correlation with ROTA at 0.01 level of significance. However, the current ratio had a significant correlation coefficient of 0.00873775 at the same level of significance. This indicated that only the current ratio could be conclusively held as being positively correlated with the return on total assets at Uchumi Supermarkets during period 2002-2011.

4.4 Regression Analysis

In addition to the above analysis, the researcher conducted a multiple regression analysis so as to test relationship among variables (independent). The researcher applied the statistical package for social sciences (SPSS) aid in the computation of the measurements of the multiple regressions for the study.

Table 4.4.1 Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.975268811	0.951149254	0.780171641	0.063214335

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (ROTA) that is explained by all the seven independent variables (total current assets, total current assets, total inventory, accounts receivable, accounts payable, current ratio and cash at bank)

The seven independent variables that were studied, explain 78.02% of the relationship between working capital elements and profitability at Uchumi Supermarkets Limited as represented by the R^2 . This therefore means that there are other factors not studied in this research which contributes 21.98% of the relationship between working capital elements and profitability at Uchumi Supermarkets Limited. Therefore, further research should be conducted to investigate these factors affecting (21.98%) the profitability at Uchumi Supermarkets Limited.

Table 4.4.2 ANOVA Model

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	155.6103958	7	37.02223006	65.56300466	.001607906
	Residual	118.0079921	190	.623996052		
	Total	343.1636025	196			

From the ANOVA Model the analysis of variance and the ‘F’ statistic (65.56) suggested that the model is fit and it is valid with the existing set of independent variables.

4.5 Coefficient of Determination

Table 4.5: Coefficient of determination

		Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	0.6047	0.5609		1.0387	0.7358
	Total Current Assets	0.4364	0.1571	0.6936	1.0278	0.8072
	Total Current Liabilities	0.2149	0.1081	0.3317	1.0268	0.8608
	Total Inventory	-0.3341	0.3935	-0.3688	-1.8491	0.4853
	Accounts Receivable	-0.1012	0.5022	-0.8092	-1.9917	0.1847
	Accounts Payable	-0.7094	0.2849	-0.1138	-1.2492	0.8265
	Current Ratio	0.4741	0.2146	0.5721	2.9209	0.0084
	Cash at Bank	0.7192	0.4226	0.0126	1.0519	0.6633

In order to determine the relationship between ROTA and the seven independent variables at Uchumi Supermarkets, the researcher conducted a multiple regression analysis. As per the SPSS generated table 4.9, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \epsilon$) becomes:

$$Y= 0.605+ 0.436 X_1+ 0.215X_2+ -0.334X_3+ -0.101X_4+ -0.709X_5+ 0.474 X_6+ 0.719 X_7$$

Where Y is the dependent variable (Return on Total Assets), X_1 is the Total Current Assets, X_2 is Total Current Liabilities, X_3 is Total Inventory, X_4 is Accounts Receivable. X_5 is Accounts Payable, X_6 is Current Ratio and X_7 is Cash at Bank.

As per the regression equation established, if all factors were taken into account (total current assets, total current liabilities, total inventory, accounts receivable, accounts payable, current ratio and cash at bank) to be constant at zero, ROTA at Uchumi Supermarkets will be 0.6047. The data findings analyzed also shows that if all other independent variables are taken at zero, a unit increase in total current assets will lead to 0.436 unit increase in the ROTA at Uchumi Supermarkets Limited. Further, a unit increase in total current liabilities will lead to a 0.215 increase in ROTA at Uchumi Supermarkets Limited whereas a unit increase in total inventory will lead to 0.334 decrease in ROTA at Uchumi Supermarkets Limited and a unit increase in accounts receivable will lead to a 0.101 decrease, a unit increase in accounts payable will lead to a 0.709 decrease, a unit increase in the current ratio will lead to a 0.474 increase, while a unit increase in cash at bank will lead to a 0.719 increase in ROTA at Uchumi Supermarkets Limited. The results of the test show that the coefficient estimates of all the independent variables, except that of the total inventory, accounts receivable and accounts payable, are positive conveying the message that these four independent variables (total current assets, total current liabilities, current ratio and cash at bank) have positive

effect on the return on total assets. From the above analysis of the betas, it can also be inferred that cash at bank contributes a lot on the ROTA at Uchumi Supermarkets followed by current ratio, total current assets and total current liabilities respectively.

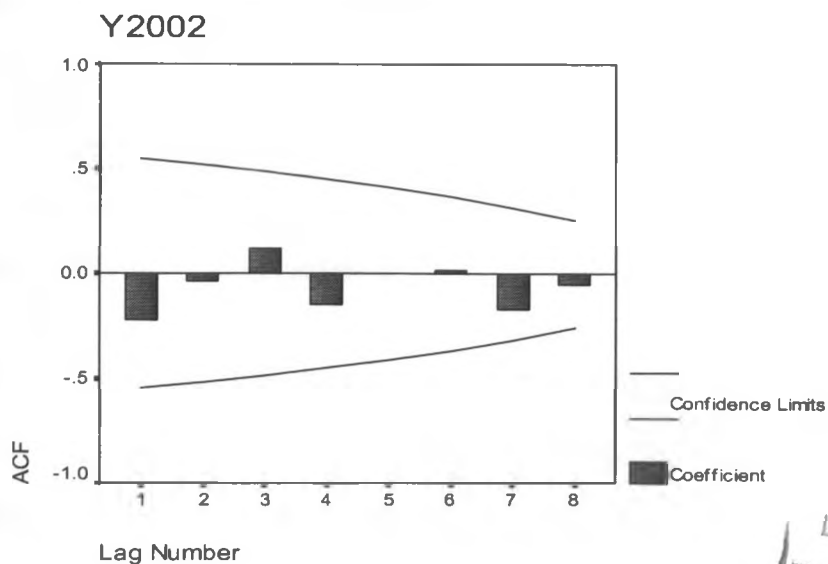
4.5.1 t-Statistic

The t critical at 0.01 level of significance at $k = 7$ degrees of freedom is 1.415. Since only the current ratio's t calculated value was above 1.415 then it is the only working capital element that was significant in explaining the return on total assets at Uchumi Supermarkets Limited. Therefore, the current ratio is the only statistically significant variable at 0.01 level of significance.

4.6 Test of Autocorrelation

Autocorrelation is a statistical method used for time series analysis. An auto-correlated time series is predictable, probabilistically, because future values depend on current and past values.

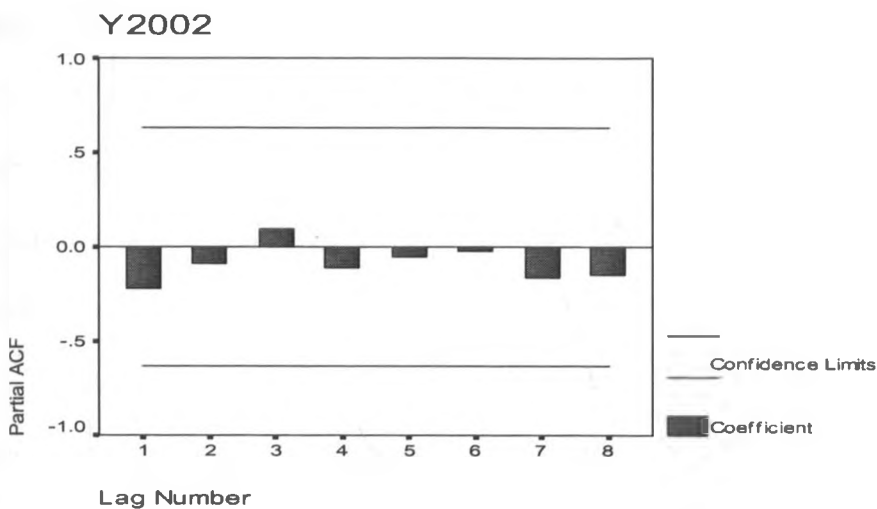
Figure 4.6.1 Test of Autocorrelation of Return on Total Assets



LOWER R.
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The autocorrelation function was the tool used for assessing the autocorrelation of the Return on Total Assets at Uchumi Supermarket. It was established that generally the ROTA had a negative autocorrelation. Therefore the ROTA was not predictable, probabilistically, because future values did not depend on current and past values within the 10 year period (2002-2011).

Figure 4.6.2 Partial Autocorrelation of Return on Total Assets



A partial autocorrelation is the amount of correlation between a variable and a lag of itself that is not explained by correlations at all lower-order-lags. The findings indicated a negative partial autocorrelation of the ROTA at Uchumi Supermarkets Limited. This indicated that at Uchumi Supermarkets Limited the amount of ROTA and a lag of itself was not explained by correlations at all lower-order-lags.

4.7 Remedy for Autocorrelation

The components of total current assets that were identified to be negatively correlated with ROTA were total inventory and total accounts receivable. Therefore, the remedy for autocorrelation of ROTA at Uchumi Supermarkets Limited would be maintenance of a steady and predictable level of inventories and debtors.

4.8 Discussion of Results

The results were discussed in relation to empirical studies and linkage of the findings to the established theories on working capital variables.

4.8.1 Relationship of the Results to Related Studies and Theory

Many researchers in the past have studied the relationship between working capital variables, profitability and liquidity of various firms and they have provided evidence to support their findings. In this study there was a negative relationship between accounts payable and profitability at Uchumi Supermarkets Limited. The findings indicated that longer credit periods could not guarantee increased profitability. This can be corroborated to the study done by Raheman and Nasr (2007) where their findings also established a negative relationship between accounts payable and profitability.

This study found a negative relationship between profitability and accounts receivables meaning that corporate profitability could be increased by reducing the number of day's accounts receivable. These results are similar to those done by Deloof (2003) where he found a significant negative relationship between gross operating income and the number of days accounts receivable, inventories and accounts payable of Belgian firms. The findings of this study confirmed the negative relationship between profitability and accounts receivables. In another study by Mathuva (2009) also found that there existed a highly significant negative relationship between the time it took for firms to collect cash from their customers and profitability. This meant that more profitable firms took the shortest time to collect cash from their customers.

This study also found a positive relationship between return on assets and cash at bank balances at Uchumi Supermarket, meaning that the more cash liquidity the more profitable the firm. These results are similar to that done by Kiprono (2004) where his objective was to determine the relationship between return on assets (ROA), return on equity (ROE), and return on net assets (RONA) against the cash flows of firms. He concluded that there is a positive or direct association between cash flows from operating activities and all the return performance indicators.

The main goal of working capital management is to manage the firm's current assets and liabilities in such a way that a satisfactory level of working capital is maintained. This is so because if the firm cannot maintain a satisfactory level of working capital, it is likely to become insolvent and may even be forced into bankruptcy. The current assets should be large enough to cover its current liabilities in order to ensure a reasonable margin of safety. The findings of this study indicated that Uchumi Supermarkets maintained a fluctuating level of current assets and current liabilities with the ratio of current assets to current liabilities which was way below the recommended levels. It therefore explains why Uchumi Supermarkets Limited was placed under receivership in 2005 when it had the lowest Current Ratio.

Working capital management may have a consequent impact on businesses survival and growth and that the management of working capital is important to the financial health of all businesses. The amounts invested in working capital are often high in proportions to the total assets employed and so it is vital that these amounts are used in an efficient and effective way. The predicament of Uchumi Supermarkets can be explained by the inability of the company to manage its working capital appropriately which resulted in lack of growth and ultimate insolvency and placement under receivership.

The twin objectives of profitability and liquidity must be synchronized and one should not impinge on the other for long. This theory was not upheld at Uchumi Supermarkets Limited where the profitability objective was not attained due to poor management of the liquidity objective. In the long run, both objectives failed and the firm was placed under receivership. The proposed the middle-of-the road approach to working capital policy whereby the matching principle states that long-term or permanent assets should be financed by long-term or permanent sources and short-term assets should be financed by short-term sources. The failure of Uchumi Supermarkets Limited could be associated by failure to uphold this policy as evidenced by the disproportionate levels of current assets and current liabilities (Current Ratio). Worse still the matching principle was not observed where by Uchumi borrowed (long-term financing) from banks to meet it short term obligations such as payment of suppliers.

Firms with too few current assets may incur shortages and difficulties in maintaining smooth operations hence efficient working capital management involves planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet due short term obligations on one hand and avoid excessive investment in these assets on the other hand. The scenario at Uchumi Supermarkets Limited was that of consistent inadequacy of current assets hence contributing to the inability to meet due short term obligations and ultimately the company being placed under receivership.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

From the descriptive statistic analysis the average total current assets, average total current liabilities, average total inventory, average accounts receivable, average accounts payable, average current ratio, average cash at bank and the average return on total assets it is indicated that the variables had a general significant fluctuation during the period of the study.

Correlation analysis showed that the working capital elements that the working capital elements that had a positive correlation with the ROTA included total current assets, total current liabilities, total inventory, current ratio and cash at bank. On the other hand, accounts receivable and accounts payable had a negative correlation with ROTA. However, at 0.01 level of significance only the current ratio had a significant correlation with ROTA.

Further test of coefficient of determination indicated that the seven independent variables that were studied, explained 78.02% of the relationship between working capital elements and profitability at Uchumi Supermarkets Limited. The ANOVA model '*F*' statistic (65.56) suggested that the model was fit and valid with the existing set of independent variables.

Lastly, the findings established that generally the ROTA at Uchumi Supermarkets Limited had a negative autocorrelation during the 10 year period (2002- 2011). In other words, the ROTA was not predictable, probabilistically, because future values did not depend on current and past values.

5.2 Conclusions

From the above findings the researcher concluded that in the period between 2002-2011, Uchumi Supermarkets operated with unfavorable current ratio of 0.743 and low cash balances that led to its inability to meet its short term obligations and deliver profitability. This resulted in the company being placed under receivership in 2005 when its current ratio was at its lowest (0.43). The company also operated with huge accounts payable balances while its receivables were much lower than the payables. This poor credit control policy could have led to the negative return on total assets and the eventual insolvency of the company.

The unfavorable current ratio was the main working capital element that significantly contributed to the dismal return on assets at Uchumi Supermarket Limited. This implied that the company did not match its short term resources with short term obligations and might have used long term resources to meet its short term obligations which led to the declining value of its total assets as evidenced by the generally negative return on total assets during the period of study, 2002-2011. It is important to note that between the periods 2008 – 2011, the return on total assets was on an upward trend meaning Uchumi Supermarket's profitability was rising. This was attributed to the loans that it received from KCB and PTA banks that improved the company's liquidity position. The company was now able to meet its short term obligations as they were falling due even though this involved use of long term sources of financing.

The coefficient of determination at and '*F*' statistic at indicated that the model was fit and valid with the existing set of independent variables. This therefore signified that the management of working capital elements was the main determinant of the profitability levels

at Uchumi Supermarket Limited and by extension any other retail stores and firms in general. However, the unpredictability of return on total assets as evidenced by the negative autocorrelation pointed to poor leadership, planning and other possible organizational inefficiencies at Uchumi Supermarkets Limited.

5.3 Policy Recommendations

The researcher recommends that the management of Uchumi Supermarkets should come up with policies that will ensure that short term sources of finance are strictly matched with short term financial obligations and vice versa. This will ensure that a favorable cash ratio is maintained and that the fixed assets are not depleted in settlement of short term liabilities. There is also need for the establishment of a robust credit control policy that will ensure that accounts receivables are collected within the shortest time possible while accounts payable are lagged without compromising on customer confidence, cash discounts and ethical practices.

The results of the study clearly signified that Total Current Assets, Total Current Liabilities, Total Inventory, Accounts Receivable, Accounts Payable, Current Ratio and Cash at Bank are the main working capital elements that should be given attention if any firm is to realize profitability and sustainability of business. Therefore, there is need for the management to offer visionary leadership through adequate planning and reduction of organizational inefficiencies in order to ensure that the position of working capital elements and profitability levels are predictable so that any variations from the set plans can be monitored and controlled adequately.

Finally, the analyses have identified critical management practices in working capital that are expected to assist managers and in this case Uchumi in identifying areas they might improve

the financial performance of their operations. The results have provided managers/directors with information regarding the basic financial management practices that the need to adopt in order to succeed. The working capital needs of an organization change overtime as does its critical cash generation rate. As such Uchumi should ensure a good synchronization of its assets and liabilities.

5.4 Limitations of the study

The study having adopted a case study design made it difficult to generalize the findings to the entire retail chain stores industry in Kenya. The study only allowed for in-depth study of Uchumi Supermarkets Limited and could not be fully inferred to other organizations.

The study was further limited by the fact that the researcher only collected secondary data and might have imported the inherent inaccuracies into the findings of this study.

The other limitation was the fact that it could not be ascertained whether the normal business operations were affected during the period which Uchumi was under the Receiver Manager hence the extent to which this would have affected the results of the study.

Last but not least, getting reliable data from other players within the retail chain sector was cumbersome as none is listed on the Nairobi Securities Exchange, the researcher had to rely on information published in the media and articles and some of these data could not be accurately authenticated. This reduced the accuracy and the extent to which comparisons could be made to Uchumi in analyzing the performance within the retail chain industry.

5.5 Suggestion for Further studies

The researcher suggests a similar study be conducted through a survey of the retail chain stores in Kenya targeting other players like Nakumatt Supermarket, Tuskys Supermarket, Naivas Supermarket and Ukwala Supermarket. This will allow for a comparison of the findings to come up with recommendations that be applicable to the whole industry in Kenya. In this study it came out clearly that the working capital elements affected the profitability within the retail chain to only a certain extent (78%), the other percentage (22%) being other variables, therefore further studies could be done to know these factors and the extent to which each of them affect profitability within the retail chain sector.

Studies could also be commissioned on working capital needs within the various industries and how they would vary and also specific to particular industries. This will therefore help in determining whether there are working capital needs specific to certain industries.

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**Appendix I: Letter to Nairobi Security Exchange (NSE) Requesting for Published
Financial Statements for Uchumi Supermarkets for the period 2002 – 2011**

Nairobi Security Exchange,
Kimathi Street, Nation Centre, First Floor
P.O. Box 43633 Nairobi 00100
KENYA

3rd September, 2012

Dear Sir/Madam

**RE: REQUEST FOR PUBLISHED FINANCIAL STATEMENTS FOR UCHUMI
SUPERMARKET FOR THE PERIOD 2002 – 2011**

I'm a student at the University of Nairobi undertaking a Masters Degree in Business Administration (Finance). As part of the degree requirements, I'm required to undertake Research Project in an area related to Finance.

This is therefore to request you to provide me with the Financial Statements of Uchumi Supermarket for the years 2002 – 2011. This will enable me obtain data related to Working Capital Elements and Profitability for Uchumi which is the subject of my study.

Thank you in advance.

Yours Sincerely

CHARLES MASIO AGWENA

Appendix II: Uchumi Supermarkrt Working Capital and Profitability Data for the Years 2002 - 2011

					Years under Review						
Variables	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Sales/Turnover	8,005,000.00	8,105,000.00	9,989,000.00	6,005,000.00	3,800,000.00	5,194,000.00	6,792,000.00	8,233,333.00	9,559,682.00	10,770,961.00	
COGS	6,989,000.00	7,658,000.00	7,912,857.00	5,553,000.00	1,527,000.00	1,237,000.00	5,553,000.00	6,750,000.00	7,912,857.00	8,943,513.00	
NOPAT	105,000.00	(315,000.00)	(780,000.00)	(1,350,000.00)	(852,000.00)	(456,000.00)	106,000.00	170,000.00	433,192.00	514,833.00	
Total Assets	989,000.00	1,220,000.00	1,108,000.00	731,000.00	1,219,112.00	1,204,345.00	1,608,030.00	2,488,650.00	2,688,112.00	3,374,932.00	
Total Current Assets	776,069.00	968,022.00	1,078,601.00	676,453.00	1,201,656.00	1,099,650.00	978,620.00	1,189,610.00	1,193,657.00	1,397,650.00	
Total Current Liabilities	1,123,000.00	1,329,000.00	1,457,870.00	1,567,050.00	1,214,440.00	1,542,254.00	1,453,070.00	1,849,050.00	1,294,440.00	1,542,287.00	
Total Inventory	389,000.00	456,000.00	618,480.00	307,950.00	634,403.00	758,002.00	622,480.00	607,950.00	635,443.00	758,002.00	
Account Receivable	111,234.00	234,567.00	326,723.00	298,789.00	501,234.00	250,102.00	126,620.00	268,110.00	215,689.00	275,338.00	
Accounts Payables	568,120.00	1,014,786.00	1,170,341.00	1,308,200.00	1,175,980.00	1,239,430.00	866,120.00	1,145,250.00	969,957.00	977,615.00	
Cash	234,000.00	201,000.00	119,432.00	13,612.00	17,099.00	87,157.00	129,410.00	213,440.00	57,099.00	87,157.00	
ROTA	0.02	(0.03)	(0.15)	(0.27)	(0.16)	(0.08)	0.07	0.07	0.16	0.15	
CR	0.69	0.73	0.74	0.43	0.99	0.71	0.67	0.64	0.92	0.91	