Industrial Engineering Letters
ISSN 2224-6096 (Paper) ISSN 2225-0581 (online)
Vol.5, No.1, 2015

An Examination of Sound Working Capital in Relation to Own Income and Liquidity Capacities of Local Government Authorities in Mara Region, Tanzania

Samwel James Marwa
Faculty of Business Administration, St Augustine University of Tanzania, PO box 307, Mwanza Tanzania
* samuelmarwaj@gmail.com

Abstract
This study, examined sound working capital strategies in relation to own income and liquidity capacities of local government authorities in Mara region.The Study involved six local government authorities which included Tarime, Musoma Municipality, Musoma District Council,Serengeti, Rorya and Bunda. Mixed approach, qualitative and quantitative, that applied a survey design was used. A sample of 66 respondents, 54 accountants and 12 external auditors, was reached to collect data through structured and semi structured questionnaires.
The quantitative data was analyzed using Karl Pearson Coefficient of Correlation whereas the qualitative data was analyzed by descriptive analysis to show frequencies and percentages.The findings indicate that there is a negative relationship between the sound working capital strategies and own source income and liquidity capacities of the LGAs. It was also found that, if the LGAs would improve on the current assets levels, own income and liquidity capacities would be optimized.The study recommends the government to take interest on the topic to conduct more researches. The LGAs are advised to be result oriented to stick on building structures instead of concentrating on recurrent payments, to see the possibility of introducing municipal bonds, to apply the strategy of matching liabilities and assets and to apply the current ratio of 2 to 1 and quick ratio of 1 to 1 to avoid excessive cash that would be invested to reap more own source revenue.
Keywords: LGAs own Income,,LGAs Liquidity capacities, Sound working capital Management, Working capital

1.0 Introduction

This chapter introduces background of the study, statement of the problem, research objectives, and research questions, significance of the study, scope of the study and limitation of the study, conceptual frame work and definition of terms.

1.2 Background of the study

Most financial statements of the local government authorities (LGA) show high dependency of finances from the central government due to a slow speed in collecting revenue from debtors and clearing the liabilities (CAG, 2011). As it will be discussed in the coming paragraphs, working capital management of the LGA need a special attention because three out of five shillings in Tanzanian government budget, is spent by the LGAs (PMORALG, 2011).

Working capital management involves management of current assets and current liabilities like inventory, receivables, cash and payables. It refers to how much liquid assets are available to run operations in terms of meeting short term obligations. It aims at maintaining an optimal balance between each of the above mentioned working capital management items (Lamberson, 1995).

According to Brigham & Houston, (2006) working capital originates from 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 the working capital because it was what he actually sold to produce profits. He borrowed the funds to buy the merchandise. These funds were called working capital loans, and they had to be repaid after each trip to demonstrate to the bank that the credit was sound (Brigham & Houston, 2006).

quality and sound working capital management has been a requirement of all organisations for many years to enable the operations. It is as equally important for business entities as well for government undertakings. Pandey, (2004: 580) argues that both gross and net concepts of working capital are equally important for the efficient management of working capital. To manage working capital in a sound way is important for both private companies and public institutions.

According to Mahraj, (2012) there is a relationship between a sound working capital and operation efficiency in terms of timely and lowly cost services to the community. For business entities, a tight credit policy to collect receivables has been a solution to solve the problem of illiquidity because funds from the debtors would be used to finance operational expenses and meet short term obligations.

This study borrows from Maharaj, (2012) whose main focus was to find out if application of working capital policies, among the LGAs, would improve their fiscal capacity. For Mahraj, fiscal capacity means the

ability to collect own source revenue to meet operational needs. Maharaj's, (2012) study shows that on average the LGAs in South Africa are very much dependent on the central government to finance their activities. In addition, the study highlights that the Concepts of working capital may also be applicable to the LGAs although very little has been done to have generally acceptable principles and approaches to be applied by the LGAs all over the world.

However, this study will be significantly different from the Mahraj's (2012) because Mahraj ignored inventory to be part of working capital basing on the argument that inventory of the LGAs are consumables. The researcher is in the view that even if inventories are consumables they affect cash flows. Cash is needed to procure, store and order these inventories. A large portion of LGAs money is used to buy inventory like fuel, drugs and stationery hence care is needed to manage it properly to increase efficiency.

Working capital issues don't only affect Tanzania. There are also the same problems in South Africa. For example, according to (Polity, 2011) there were areas requiring special attention in South African municipalities regarding finance, compliance and performance. It was seen from this study that the municipalities in South Africa were not collecting their own income as expected and so this lead to a high dependence on the central government.

As it can be seen from this study, there is a need for scholars and academicians to have their focus on issues pertaining to working capital management (WCM) of local government authorities in order to have a common understanding and terminologies concerning WCM. This is because the main focus of the professional bodies and academicians has been to business and profit oriented organization. For example what could be a replacement of profitability ratios to government institutions?

This study focuses to the local government authorities of Tanzania (LGAs) which were established under the Local Government (District Authorities) Act and the Local Government Act No. 8 (Urban Authorities) Act of 1982. There are 114 LGAs all over the country (PMORALG, 2011). These entities are vested with the capacity to own and manage noncurrent and current assets in the area of their jurisdiction. The LGAs comprise of city councils, municipals, district councils and town councils.

Most financial statements of the LGAs show high dependency of finances from the central government due to non compliance of the Act and a slow speed in collecting revenue from debtors and clearing the liabilities. For example, in the year 2006, forty four (44) councils disclosed debtors aggregating to Tshs.4, 621,642,416, creditors amounting to Tshs. 7, 527,162,259 and government grants amounting to Tshs.2, 665,196,806 remained unspent by councils (CAG, 2006).

These issues indicate that there is deficiency in WCM. Unspent two billion Tax payers money sounds a lot and as you can see it delays the intended activities and services; putting into consideration that the value of money today is more than the value of the same money tomorrow, due to an inflationary environments.

Apart from own source income, the LGAs are receiving huge amounts of money from the central government to supplement their budgetary needs. As one can see, it is important for these LGAs to have and/or use standards or benchmarks on how to manage their working capital. Failure to collect one's own revenue, (rates, taxes, services), leaves the local government unable to meet the day to-day activities and leads to increasing compliance risk (Maharaj, 2012)

The current state of affairs of the LGAs indicates that, there is a non compliance to exploit their full financial capacity. When being assessed, the need is being seen for the LGAs to exploit this capacity to reduce the burden placed on the national treasury. (CAG, 2011)

Local government money is an important and integral part of the public finances of Mainland Tanzania today. In fact, about one out of every five shillings spent in the public sector is spent at the local government level. As a result, a sound system of local government finance and intergovernmental relations is a key factor in assuring that the public sector provides an enabling environment for economic growth and reducing poverty (PMORALG, 2011).

According to MKUKUTA and with Tanzanian Vision 2025, accurate and up-to-date information on local government finances, including information about management of working capital, is important in order for local government officials to improve the quality of local services, as well as for communities to hold central and local government officials accountable for the funding of local government service delivery (PMORALG, 2011).

The LGAs may have been trying to manage their working capital without fully complying with theories of managing liquidity ratios and Economic Order Quantity. Financial managers of these LGAs may have been managing the same on a ad hoc basis .They are required to procure their supplies in aggregates and to avoid emergency purchases to minimize costs (Procurement Act, 2004)

The study aims at examining the LGA working capital policies with the aim of having uniform standards and improvements to manage cash, debtors, inventory, and creditors in the local government authorities in Tanzania

1.3 Statement of the problem

This report examines whether sound working capital can positively influence the amount of own income and liquidity capacities of a municipalities. As it has been indicated in the CAG, (2006) report, The LGAs face creditor, debtor, cash and inventory management problems. Poor management of these issues may lead to aggravation of the problem

The study aims at putting emphasis on importance of operating sound working capital and the influence that they have on improving the ability to raising LGA own income and liquidity capacities .

1.4 Research objectives

1.4.1 General objective

To examine the sound working capital and its influence on the amount of LGAs own income and liquidity capacities of municipalities.

1.4.2 Specific objectives

The following are specific objectives of the study:
To find out LGA actual working capital
To examine relationship between working capital strategies and the amount of own source income .
To examine relationship between working capital strategies and liquidity capacities of the LGAs.

1.5 Research questions

Mahraj, (2012) argued that sometimes research questions are used if not much is known on the topic to make research arguments. As not much has been written in this area; research questions will be used.
The questions are as follows:
Do LGAs have and apply appropriate sound working capital strategies?
What is the relationship between the amounts of LGAs own income and sound working capital strategies?
What is the relationship between sound working capital strategies and liquidity capacities of LGAs?

1.6 Significance of the study

The researcher had a look at WCM of LGAs to come out with universal accepted standards. The study had came up with outcomes and suggestion on what to be done in future. To finance managers the study will help them to improve the ways they manage working capital to make sure that both investment and liquidity decisions are improved. This can be achieved by those managers to look at the trends of WCM of the country put together. The community will get the expected services from the LGAs as appropriately as possible because the chances of the LGAs being illiquid and out of stock will be minimized. The study will assist the government to implement her policy and strategies in a more sound way as compared to how it used to be. Flaws in the policies will be highlighted

1.7 Scope of the study

The researcher aimed to make his study in Mara region. The researcher consulted The Controller and Auditor General Office at Musoma for issues pertaining to how the government perceives these LGAs in terms of sound working capital management to get some suggestions.

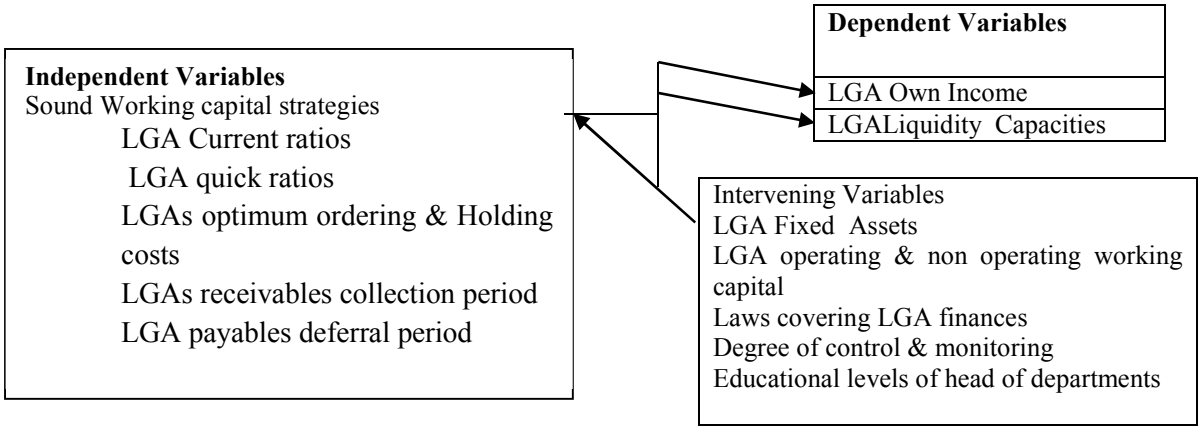
1.8 Limitations of the study

Some of the participants were unwilling to produce data. The researcher used several arrangements and methods to persuade the respondents to give data. The study covered only six district councils while the generalization is for the whole country. Six district councils may not be a representative sample. The researcher was short of funds and this caused some of the activities to delay as expected

1.9 Conceptual frame work of the study

This study examines the correlation between sound working capital and liquidity capacity and own income of the LGAs in Mara region. The concept was put into variables, independent and dependent, to enable easy measurement.. The following figure describes the module as follows:

Figure 1.1 Conceptual Framework



Sound working capital management is based on whether or not Management is applying the best practices of managing current liabilities and assets instead of applying an ad hoc basis. Having sufficient optimal levels of current assets is necessary for an organization to survive to achieve optimal liquidity capacities and own source income

Sound working capital management is concerned with application of some benchmarks already in academic books like an Economic Order Quantity theory (EOQ). Applying EOQ policy enables the firm to make a balance between how much and when to order inventory at the minimum possible cost. Storing more inventory than required is costly because excessive warehouses will be required. Having too little inventory leads to the possibility of the firm being out of stock which may necessitate the firm to purchase the inventory at higher prices . Optimal level of stock may assist an LGA to optimize liquidity capacity and own source income. For example the money that could be used to purchase excessive inventory could be used to do other services to the community or it may be used for investment purposes to maximize own source income

Current ratio is an indication of how far the LGA can meet its short term obligations. Optimum levels of current assets need to be applied to maximize own source income and liquidity capacities of the LGAs

Investing any idle cash will be beneficial to the LGAs because it will increase their own source revenue and hence the quick ratio will be strong. The money so obtained will be used to generate value to the country instead of remaining idle in the LGA's bank account.

It may be argued that for the LGA to extend credit to debtors it maximizes own source revenue because at the moment you sell on credit, revenue is recognized regardless of when we receive actual cash. But again the firm needs to put strict measures to make this money come in within a short range of time in order not to threaten the liquidity position of the firm.

If the entity delays too much in paying back its obligations to creditors, it may be harmful because the creditors may have a negative attitude which may threaten liquidity capacity of the LGA. Sound working capital management assures that there is always sufficient cash to meet due obligations by making sure that the receivables are collected in time.

Short term liabilities is a good source of external funds but the LGA needs to make sure that at least two third of the current assets have been financed by own source funds. If the bigger part of current assets is financed by external funds, it may be an indication of the firm becoming illiquid in the near future.

The intervening variables will affect dependent variables to cause optimal liquidity capacity and own source income. The government legal frame work facilitates application of the WCM policies. If Management takes measures for controls to make sure that the policies are implemented then the dependent variables will be activated and the result is the optimal liquidity capacity and own source income. Education levels of the officers is the important factor to enable implementation of WCM within an organization

1.10 Definition of Key Terms

1.10.1 LGAs own Income

LGA own income is revenue which accrues from local sources of the Local Government Authority (LGA). These LGAs according to the Local Government Finances Act, 1982, have a legislated function of collecting their own revenue apart from the revenues from the central Government and other foreign donors. This part of own revenue is very important to assist the LGAs meet both short and long term obligations. LGA own income include service levy, tender application fees and Bus stand parking fees.

1.10.2 LGAs Liquidity Capacities

Liquidity may be defined as the cash position to meet operational needs and obligations of the LGA. Liquidity is money and how the LGA can finance its activities in a short period of time. Pandey, (2004) defines liquidity as how fast the LGA may pay its short term obligations. Wood, (2002) defines liquidity as being able to pay LGA's debts as they fall due is Liquidity. Shapiro, (2006) defines money as providing liquidity you can use it to purchase goods and services.

1.10.3 Sound working capital management

.Sound working capital management means applying optimal levels of current assets and liabilities. Nazrul, (2012) defines sound working capital as making sure that there is no either excessive or insufficient working capital. Excess current assets are misuse of funds as the excess would be used for investment while insufficient working capital is a threat for smooth operation of the LGA.

1.10.4 Local government Authorities

Local Government Authorities of Tanzania (LGAs) are the district level authorities which were established under the Local Government (District Authorities) Act and the Local Government Act No. 8 (Urban Authorities) Act of 1982. The types of these authorities range from township authorities, town councils, district councils, municipalities and cities.

1.10.5 Working Capital

Working capital is investments in current assets to enable an entity to run its operations. They include inventory, accounts receivable and cash. It refers to both current Assets and current Liabilities (Zelman et al 2008). Dickson, (1991) defines working capital as investments in assets which are expected to be realized and produce cash during the trading year. He says these assets can be financed either by long term equity (such as own source capital) or current liabilities.

2.1 Literature review

This section discusses about the issues related to theoretical and empirical literature review.

2.2 Theoretical Literature Review

2.2.1 Sound working capital

Sound working capital may be defined as to have the appropriate levels of current assets and liabilities to facilitate smooth operations of the firm. Nazrul, (2012), argues that for the firm to have a sound working capital is to make sure it has not excessive and insufficient working capital. Excess current assets are misuse of funds as the excess would be used for investment and insufficient working capital is a threat for smooth operation of the LGA. In order to perceive the LGA as sound in working capital management; one should strive at looking at a quick ratio of 2 to 1, current ratio of 2 to 1, relative shorter period of receivables collection period in relation to the payables deferral period and the LGA need to order the quantity that optimizes both the ordering and holding costs.

2.2.1.2 A quick ratio of 1 to 1

This is one of the prerequisites of sound working capital (Pandey, 2004). It means that the internally financed current assess can cover all the obligations of the LGA. This is the ratio which indicates how quickly the LGA can meet its short term obligations without relying on inventory. According to Pandey, (2004) an asset is liquid if it can be converted into cash immediately or reasonably soon without loss of value. Cash is the most liquid asset relative to inventory, receivables and marketable securities. According to Pandey, (2004) a quick ratio of 1 to 1 is considered to represent a satisfactory liquid position of an LGA.

2.2.1.3 A current ratio of 2 to 1

The ratio implies that both quick going and slow moving items with the LGA are there to cover operational expenses and outside obligations. It indicates a relationship between the current asset and the current liabilities. It indicates how the LGA can meet its short term obligations by using its current assets. According to Pandey, (2004) , the current ratio of 2 to 1 is considered satisfactory. The ratio of this tune indicates that even if the value of current assets becomes half, they will be able to meet the LGA obligations. Pandey, (2004) says that the current ratio represents a margin of safety for creditors.

As you can see, it is important for an LGA to set the current ratio of 2 to 1 to enable it to be in a safer position. Whenever the ratio is above 2 to 1 the council needs to utilize the deference or to invest it to maximize its liquidity capacity and own income.

2.2.1.4 Average Collection Period

This is the average period of time spent to collect receivables from debtors. According to Pandey, (2004) the average collection period measures the quality of debtors since it indicates the speed of their collection. According to Pandey,(2004) the shorter the average collection, the better the quality of debtors since a short collection period implies prompt payments by debtors. According to Pandey, (2004) the average collection period should be compared against the LGA's credit policy to judge its efficiency. From this argument therefore it may be argued that it is important for an LGA to have credit policy against which the actual average collection period can be measured

2.2.1.5 Economic order Quantity

This is the quantity of inventory which if ordered minimizes both ordering and holding costs. Pandey, (2004) argues that determining an optimum inventory level involves two types of costs: (a) ordering costs and (b) holding costs. The Economic order Quantity is that level that minimizes the total of ordering and carrying costs. The term ordering costs is used in case of supplies that may be needed by an LGA in providing services to the community. The costs include requisitioning, transport and receiving.

Inventory carrying costs for an LGA according to Pandey include storage, insurance and obsolescence

From the above arguments it may be said that the LGAs need to consider how much inventory they order or keep in the store to minimize costs. The costs that are saved here may be used to optimize liquidity position of the LGA and service provision to the community.

2.2.1.6 Payables Deferral Period

This is the average period which the LGA may delay in paying its obligations to short term creditors. According to Brigham & Houston, (2006) payables deferral period measures the days which may be delayed before paying creditors back. Payables deferral period may be obtained by dividing 365 days by accounts payable turnover or dividing payables by one day supplies. The measure shows stake holders how many days the LGA uses to pay back its payables. For example, if the LGA makes Tshs 100 million in purchases from suppliers in a year and at any given point holds an average accounts payable of Tshs 20 million, the accounts payable turnover ratio for the period is 5 (Tshs100 million/Tshs 20 million). If the turnover ratio is falling from one period to another, it is a sign that the LGA is taking longer to pay off its suppliers than it was before. The opposite is true when the turnover ratio is increasing, which means that the company is paying of suppliers at a faster rate. According to Pandey, (2004), the LGA needs to put a payables deferral period policy which will be measured against the actual results from financial statements.

2.2.2 LGAs own Income

LGA own income is revenue which accrues from local sources. These LGAs according to the Local Government Finances Act, 1982, have a legislated function of collecting their own revenue apart from the revenues from the central Government and other foreign donors. This part of own revenue is very important to assist the LGAs meet both short and long term obligations. According to the Local Government Finances Act (1982), the sources of income to the LGAs include the following:

all fees for licenses granted within the area of the urban authority
all moneys derived from the registration of taxi-cabs and commuter
buses playing within the area of the urban authority;
all the fees for licenses granted under the Business Licensing .
all fees for licenses in respect of theatres or other places of public entertainment
all moneys derived from rents or fees collected for renting or use of public houses or buildings owned by the urban authority

2.2.3 LGAs Liquidity Capacities

Liquidity may be defined as the cash position of the LGA to meet operational needs and obligations of the LGA. Pandey, (2004) argues that liquidity is how fast the LGA may pay its short term obligations. Wood, (2002) argues that being able to pay LGA's debts as they fall due is Liquidity. Shapiro ,(2006) argues that money provides liquidity as you can use it to purchase goods and services. Pandey, (2004) argues that a finance manager needs to decide on how well he or she can mix debt and equity in the capital structure to achieve objectives of the LGA. As you can see from these arguments one may argue that liquidity is money and how the LGA can finance its activities in the short period of time.

2.2.4 Issues in Working Capital Management

This section explains some of the issues which are necessary for any firm to follow in order to have a sound working capital management. It is from this angle, the researcher is going to come up with the measures to solve

the problem of improving working capital management in the LGAs. It includes the importance of working capital, cash management, receivable management, inventory management, working capital cycle, net working capital, operating assets, working capital policy, relaxed current assets investments policy, restricted current assets investment policy, moderate current assets investment policy, permanent current assets, temporary current assets and municipal bonds.

2.2.4.1 Importance of Working Capital

Working capital is as important as blood in the human body or fuel in the motor vehicle. Competent drivers know how much petrol to buy when going longer and shorter distances because they know without sufficient fuel inconveniences will occur'.Zelman, et al (2008) argues that although noncurrent assets provide the capability to provide service to the stake holders, it is the combination of current assets and current liabilities that turns that capability into service. For example an X ray machine is useless without an adequate supply of film on hand or cash to pay the radiation technologist.

Baig, (2009) on the other side argues on the importance of working capital that if a firm has inadequate working capital – the money necessary to keep the business running – the firm is hopeless and it will fail. The LGAs may be forced to close their doors due to their helplessness to meet short-term debts when they come due. By implementing sound working capital management strategies, your entity can flourish; in other words, assets are working tools for the firm. The objective of working capital management is to make certain that the firm is able to carry on its operations and that it has enough cash flow to satisfy both maturing short-term debt and forthcoming operational expenses.. In order to improve the working capital management practices, it is essential for the finance managers to adopt a proper approach of working capital management to drive their respective firms towards success in order to generate the value to their stakeholders.

Working capital is important to an LGA because it enables availability of funds to pay daily bills like wages and so on. It is important for an entity to manage its working capital especially if there are longer periods between provision of service and receiving back the money for it. In this case the entity has already used the money for the product to cover for labor, raw material and so on but not yet got any money for it. This situations necessitates the LGA to have excess fund to be able not to collapse

2.2.4.2 Cash Management

Cash management is the process of planning and controlling cash flows into and out of any organization and cash balances held by those organizations at a point in time (Pandey, 2004). Efficient cash management involves determination of optimal cash to hold by considering between the opportunity cost of holding too much money and the cost of holding too little cash (Ross,et al,2008). Atrill, (2006) argued the need for a careful planning and monitoring cash flows over time so as to determine the optimal cash to hold. Kwame, (2007) established that the setting up of a cash balance policy ensures prudent cash budgeting and investment of surplus cash.

2.2.4.3 Receivable Management

This is the management of receivables of an undertaking. It involves provision of a trade credit as a marketing strategy of an undertaking to expand or maintain cash inflows (Pandey, 2004). Brigham & Houston (2008) observed that an increase in the level of accounts receivables of the firm increases both the net working capital and the cost of holdings and management of accounts receivables and both lead to a decrease in the value of the firm. From this argument it may be concluded that it is better for the entity to have a small and reasonable amount of debtors to enhance liquidity positions to the LGAs.

2.2.4.4 Inventory management

Inventory management is primarily about specifying the shape and percentage of stocked goods required at different locations of the LGAs, within many locations of a supply network to come first the regular or planned course of operation and stock of materials. The reasonable inventory level needs to be stored to avoid interruption of operation and high reordering costs (William, 2010).

In managing inventories, an LGA should strive at maximizing stake holders' value by determining the optimum level of inventory. Unnecessary high inventory level increases unnecessary costs to the LGA. The LGA should ask itself how much should be ordered and when to be ordered. In determining how much to be ordered the economic order quantity is achieved (Pandey, 2004).

2.2.4.5 Working Capital Cycle

To manage current assets effectively it is important to check with the timings of receiving the funds from debtors and paying money to creditors. It involves ensuring that total cash inflow cover cash outflows, or the LGAs will have to obtain cash from sources other than existing revenues such as short term borrowings (Zelman, et al 2008). It may be argued from this point that if the LGAs delays in paying its obligations to its employees or suppliers,

and if it is late in having the receivable collected in time, it may be difficult to maintain operations.

2.2.4.6 Net Working Capital

Net working capital indicates how much sound or how much in current assets may remain in business if all liabilities were paid. Investment in net working capital is kept in the project to cover the obligations of the entities. It represents the current assets purchased by own source income of the LGA. It arises whenever inventory is procured on a credit basis, cash is kept to cover unexpected expenditure, and outsourcing is made to create accounts receivable. Investment in working capital is reduced by accounts payable which are the obligations of the LGA (Ross, and Jaffe, 2007)

2.2.4.7 Operating assets and non operating assets

Operating assets consist of cash and marketable securities, accounts receivable, inventories, and fixed assets necessary to operate the LGA, and non operating assets are assets which would include cash and marketable securities above the level required for normal operations, investments in other financial institutions, land held for future use, and the like. (Brigham and Houston, 2006). This is an extra evidence of the LGA requirements to utilize resources in a wise manner to achieve its mission of providing service to the community at lowly possible cost by making sure that the levels of current assets is no beyond the recommended levels

2.2.4.8 Working Capital Policy

Working capital policy refers to the firm's policies regarding target levels for each category of current assets and how these assets will be financed (Brigham & Houston ,2006) It comprises a set of rules set to manage inventory, debtors, cash and creditors of the Local Government Authority .

2.2.4.9 Relaxed Current Asset Investment Policy

A policy under which relatively large amounts of cash and inventories are carried and under which income is stimulated by a liberal credit policy, resulting in a high level of receivables. (Brigham & Houston, 2006). This is when the LGA does not take any measure to collect revenue from its debtors. For example, if it takes two years for a debtor to pay an obligation of say Tshs 200,000.00.

2.2.4.10 Restricted Current Asset Investment Policy

A policy under which holdings of cash, inventories, and receivables are minimized (Brigham & Houston, 2006). In other words restricted current assets policy restricts the LGA to hold excessive cash, receivables and inventory. For example to have the rules that need the LGA to invest any idle money.

2.2.4.11 Moderate Current Asset Investment Policy

This is a policy that is between the Relaxed and restricted policies (Brigham & Houston, 2006). It is to mean that the firm following this kind of a policy will be in somewhat possibility of holding extra cash or inventories. In other words under this policy the LGA is in danger of paying non beneficial stock holding costs or losing cash investment chances

2.2.4.12 Permanent Current Assets

This is the current assets a firm must have at all times of its cycles (Brigham & Houston 2006) it is the minimum level of current assets under which the firm may not be advised to be. This permanent working capital or current assets is permanent in the same way as the LGA's fixed assets.

2.2.4.13 Temporary Current Assets

These are the current assets that fluctuate with seasonal or recurring variations in operations (Brigham & Houston 2006). It is the extra working capital needed to support the changing operational volume of the firm (Pandey, 2006). The LGA may have this temporary current asset when it needs to perform a certain unusual activity like uhuru torch occasions. In these occasions the council may be required to have excess fuel, food and money to pay allowances to the officers responsible with the event.

2.2.4.14 Municipal Bonds

Municipal bonds are securities issued by municipal governments to finance school building, bridges, hospitals and wells (Brigham & Houston, 2006). The bond holders are expecting interest from their bond investments but the rate is relatively low, if we compare it with interest charged by other financial institutions.

2.3 Empirical Literature Review

The following section discusses some studies which relate to the topic. It combines a review of both profit and

nonprofit making organizations because, although they have different missions, the essence of working capital remains the same. This was done because the topic seems not to have been researched much in the areas of working capital management of the Local Government Authorities. The studies covering other disciplines have been translated to suit the topic under the question

Murthur et aal (2010) studied the Relationship Between Working Capital Management and Profitability: Evidence From The United States. The study found that there is a significant relationship between the cash conversion cycle and profitability, measured through gross operating profit. It follows that managers can create profits for their companies by handling correctly the cash conversion cycle and by keeping accounts receivables at an optimal level.

This is the evidence that working capital may have a bad impact if the LGA will ignore its essence on achieving liquidity capacities. The LGAs need to make sure that accounts receivable are at reasonable levels which may not threaten the liquidity position of the LGA in question. These levels may be determined accordingly following the environments of the LGAs. The LGAs may have to extend credit to revenue collecting agents but again measures would have to be set to make sure that these receivables are collected soon following the terms set between them and those collecting agents

Saad, (2010) studied Working Capital Management: The Effect of Market Valuation and Profitability in Malaysia. Using correlations and multiple regression analysis, the result showed that there are significant negative associations between working capital variables with firm's performance. The study concluded that there is importance of managing working capital requirements to ensure an improvement in firm's market value and profitability and this aspect must form part of the company's strategic and operational thinking in order to operate effectively and efficiently.

As you can see from this study, in order for an LGA to prosper, it has to include working capital items in its strategic and operational thinking. Each LGA need to think what will be the amounts and a picture of current liabilities, inventory and cash at least five years before the items come into realities. Working capital is the blood of any institution. It has to be planned early to avoid operating problems

Chowdhury & Amin (2007) studied Working Capital Management Practiced in Pharmaceutical Companies Listed in Dhaka Stock Exchange. Using a survey design and secondary time series, the findings indicated that the sample firms in the industry had been efficient in managing Cash, Account Receivables and Payables. For this industry, it was found that maintaining large volume of Inventory doesn't reflect inefficient management. A positive correlation had been found in the mathematical model, between current assets management and financial performance of Pharmaceutical firms. Thus it is evident that for the overall performance of this industry, working capital plays a vital role.

In order for the LGA to be effective and efficient financially and to perform its mission better, current assets management will be a vital aspect. Managements of respective LGAs need to assess and deside what would be the optimal level of current assets in order to optimize performance

Ali,(2011) explored the association between working Capital Management and the profitability of Textile firms in Pakstan Using a balanced panel dataset covering 160 textile firms for the period 2000–05. The study found that the return on assets was significantly and negatively related to average day's receivables, positively related to average days in inventory and negatively related to average day's payable and positive correlation with cash conversion cycle. The study concluded that there are links between profitability and efficiency of working capital management.

As it can be learned from this study, the items of working capital relate very much to the effectiveness of the council. It is very important to have stable policies that will enable the LGA to maximize customer and all stake holders' satisfaction. Any policy adopted on WCM has impacts to the firm's liquidity.

Nyabwanga et al, (2012) investigated the effects of working capital management practices on Financial performance: A study of small scale enterprises (SSEs) in Kisii South District, Kenya Using a cross-sectional survey research design, the study found that on average the managers of those enterprises rarely prepared cash budgets, invested surplus idle money to get more profits and they had a limited knowledge on how to manage working capital effectively. The Study concluded that the majority of the SSEs were not good at managing their working capital since they seemed not to have embraced and implemented efficient working capital management routines in their business.

Financial performance depends on working capital management. Cash budgets assist the managers to forecast revenue and expenses in advance of cash flows. Investment of idle cash would be helpful to strengthen fiscal capacity of the council. The LGAs need to have expectation of cash flows and their balances and to have plans on when and where to invest idle funds. As the study points out, it is important for the firm to incept and implement efficient working capital policies..

Azam, (2011) investigated the Impact of Working Capital Management on Firms' Performance: Evidence from Non-Financial Institutions of KSE-30 index. Using a panel data the study found that working capital management has significant impact on firms' performance and it was concluded that managers can

increase value of share holder and return on asset by reducing their inventory size, cash conversion cycle and net trading cycle. It was also concluded that an increase in liquidity and time period to supplier will also lead firms' overall performances..

Working capital management has impact on LGAs performance. Stakeholders' satisfaction may be increased if the level of liquidity is optimized. If the inventories are used for the intended purpose on a timely basis, the value for money is optimized. The LGA will be in a position to provide the expected service at the lowest possible cost.

Valipour et al, (2012) studied The Impact of Company Characteristics on Working Capital Management case of the listed companies on the Tehran Stock Exchange. Using a correlation approach and multiple regressions and Pearson's correlation the study found that the effective factors in great levels were profitability, operating cash flow, debt ratio and sale growth, in the average level, the effective factors were profitability, company size, sale growth and debt ratio, and small levels were affected by profitability, sale growth, current ratio, quick ratio and debt ratio.

The importance of working capital items is seen from those studies. Managing the same is like one manages the availability of fuel for the car to operate. A driver will make sure that there is a sufficient level of petrol for the car to travel. The levels will depend on whether the car travels longer or shorter safaris.

Mahraj,(2012) studied the effect of good working capital policy on exploiting the fiscal capacity of municipalities in KZN, using a survey design, covering a sample of nine municipals, the study found that most officers were unaware of the legislations about working capital policies. The study also found that there was a big dependence on the central government to finance the activities of the municipalities. The debtors were not collected timely. There was a strict deferral creditor paying period less than thirty days. The study shows that there was a poor liquidity position for some of the municipals. For example, an acid test ratio of 0.32 for some of the councils. There was also an indication of idle cash for some of the councils because some of them had about 4.0 acid test ratio. The study concentrated mainly on three aspects of working capital cash, debtor and creditors. Mahraj concluded that there is a need for further studies on these issues pertaining to WCM of the LGAs.

The LGAs to have dissimilarities in WCM indicates there is a need to put more emphasis on these issues to obtain uniformity. Accounting professional bodies need to address these issues to enable the same levels of awareness and implementation of policies among the officers all over the country. Accounting manuals with standards and directive benchmarks may be prepared.

Yiadom & Agyei , (2006), 'Studied working capital management practices of small scale enterprises in the central region of Ghana. Using descriptive statistics it was found that 38 percent of SSEs received credit from their suppliers and the average credit period ranged between two weeks to one month. On the other hand, the credit period given by SSEs to their credit customers ranged between less than a month and 60 days. Two main problems faced by SSEs in dealing with credit customers are late payment and bad debts.

This is an indication of poor working capital management if the LGA may adopt it. Payables deferral periods need to be more extensive than receivables deferral periods. This is because nowhere the LGA will get money to finance those payables while receivables are not yet to be received. This situation might bring pressure to the LGA and efficiency will be minimized.

Mojtahedzadeh et aal, (2011) studied The Relationship between Working Capital Management and Profitability of the Companies (Case Study: Listed Companies on TSE). Using Multivariate regression and Pearson correlation; Findings showed a negative significant relationship between cash conversion cycle, number of days of account payables, number of days of account receivables and corporate profitability. The study also found significant relationship between corporate profitability and working capital management and positive relationship between logarithm of sales and profitability, and a negative relationship between financial ratio and profitability.

These findings indicate that there is a strong relationship of working capital management and operational efficiency of the LGA. It means if the receivables and payables period extend the efficiency of the LGA will be decreasing. The LGAs need to shorten these periods to achieve better their mission of providing service to the community

2.4 Knowledge Gap

Having read all the material related to this study, the researcher is in the view for something to be done to improve the quality of WCM of Governmental Institutions. As Mahraj, (2012:10) pointed out, no much research has been done in these areas for matters concerning working capital management of the LGAs. The main focus has been to small and medium enterprises and other profit oriented institutions.

3.1 Research Methodology

This section outlines the methods and procedures which were used in data collection in order to achieve the specific objectives of the study. It covers research design, sampling techniques, sample size, site selection, target

population, research instruments, methods of data collection and data analysis

3.2 Research Approaches

There are two basic approaches to research, quantitative and qualitative approaches. The former involves the generation of data in quantitative form while the other is concerned with an assessment of attitudes and opinions (Kothari, 2004). The researcher used qualitative research approach to enable those who are studied to speak for themselves, to provide their opinion in words and other actions. Both approaches, quantitative and qualitative, were used in order to collect data as appropriately as possible to ensure the objectives of the study are met.

3.3 Research Design

This is a basic plan that guides the data collection and analysis phase of the research project. (Kinner & Taylor, 1996) defines research design as a frame work and plan for a study used as a guide in collecting and analyzing data. It is a blue print that is followed in completing a study.

For this study, the researcher used a survey research design which is a method of collecting information by asking questions to get opinions of respondents. Face to face, postal mails and telephone communication were used to correspond with the respondents. The design was used to evaluate the extent to which the LGAs achieve their goals especially in working capital management.

3.4 Population of the Study

Population is a whole group of individuals possessing common characteristics which are of interest to the researcher. Knowing the population is the first step before the researcher develops any sample design (Kothari, 2004). The population of this study included the accountants of the LGAs in Mara and external auditors as follows:

Table 3.1 Population of the Study

Employees	Population
Accountants in Finance Department	54
External auditors	12
TOTAL	66

Source: Researcher own calculation

3.5 Area of the study

The study targeted all the LGAs in Mara region to check as to whether they manage working capital as it has been suggested by different literature and local authorities Financial Memorandum. The main focus was on the finance department and external auditors

3.6 Sampling procedures

This is a procedure of selecting some elements of population so that they represent the actual characteristics of the total population from which it is drawn (Kothari, 2004). This research applied a purposive and stratified sampling.

3.6.1 Purposive sampling

Purposive sampling bases on ease of access of the areas and respondents that are to be researched. Purposive sampling is a non probability sampling that involves deliberate selection of particular units of the universe for constituting a sample (Kothari, 2004). The researcher targeted the officers who have dealt with managing working capital in the LGAs to get reliable information.

3.6.2 Stratified Sampling

A population may consist of identifiable sub groups which can be viewed as different layers or strata. Stratified sampling ensures that every sub group in the population is represented in the sample (Kothari, 2004). The strata included finance departments and external auditors.

3.7 Sample Size

This is a number of items to be selected from the universe to constitute a sample (Kothari, 2004). It is a section from which the researcher gathers information to draw conclusions of the populations. In this study, 66 individuals were questioned as follows:

Table 3.2 Population and Sample size of Each Stratum

Strata	Population	Sample Size	Percent %
Accountants in the Finance Departments	54	54	81
External Auditors	12	12	9
TOTAL	66	66	100

Source: Researcher own calculation basing on the population and sample size

3.8 Research Methods

Research methods may be understood as all those techniques used in conducting research. It pertains to all those methods used by the researcher to collect data intended to solve the research problem (Kothari, 2004). The researcher used quantitative data, qualitative data and secondary data to answer the research questions

3.8.1 Quantitative data

Quantitative data is any data that is in numerical form such as statistics and percentages (Lisa, 2008).The researcher collected quantitative data from financial statements of LGAs in Mara region to find out information concerning trends in current ratio, quick ratio, apayable deferral periods and accounts receivable deferral periods. Correlation analysis also was done to check correlation between the variables.

3.8.2 Qualitative Data

Qualitative data aims at gathering an in-depth understanding of human behavior and the reasons that govern such behavior (Denzin et al, 2011). In collecting this information, the researcher used structured interviews and questionnaires to understand opinions of the respondents for matters relating to WCM of the LGAs. The aspects that were sought were disguised in order to reveal a real situation

3.8.3 Secondary Data

Secondary data are the data which have not been collected with a specific research purpose. The data might have been prepared for management, planning, control and evaluation purposes (Sorensen et al, 1996). The researcher used some manuals like Local Authorities Financial Memorandum to find out what are the directives of the government with matters relating to WCM of the LGAs. Financial statements also were consulted to find out the soundness of working capital items.

3.8.4 Research instruments

The study used questionnaires and interview schedules to collect data. These instruments were delivered by hand for the hope of collecting the answers on agreed days between the researcher and the respondents. Some instruments were sent by post to cover distant respondents The deadline for these posted instruments was shown in the form to allow the respondent a chance to know if he is in time to answer the questions. Telephone communication was also used for some respondents

3.8.5 Interviews

The researcher used semi structured interviews. In semi structured interview all questions were in the same order to allow in depth similar information for the respondents who were far away; telephone and mail interview was used.

3.9 Piloting

This is pre testing stage which researchers use to check research instruments. It is important to make a pre testing to reduce chances of the respondents to misunderstand the questionnaires .To avoid redundant language, vocabulary will also be checked at this stage (Wilkinson, 2000) .The researcher used a fraction of the sample for this purpose and corrections were done accordingly.

3.10 Data analysis

Data collected was analyzed by using both quantitative and qualitative methods. The use of tables and charts was used to present outcomes. Statistical package for social studies (SPSS) and office microsoft excel were used to analyze data; percentages were used to analyze data. Karl Pearson Coefficient of Correlation was tested to check correlations between independent and dependent variables. The qualitative data was analyzed through a descriptive analysis according to what descriptive data had been found on the field

3.11 Outcomes

Results were related with the statement of the problem and argument was built to refute or accept the statement of the problem (Mahraji, 2012)

3.12 Limitations

This section explains the Limitations of the research findings which were faced especially in terms generalization and conclusions as regards to the population Kothari, (2004) argues that the research need to be valid in terms of its capacity to be generalized to other people and items of the same situation. The following are the limitations: of the study.

Firstly, a sample might not be representative to the population because there might be some slight environmental differences between one district council and another. Another Limitation is the possibility of the findings and generalization of the study not to apply for the next future years due to changes in policies and rules by the government of Tanzania

3.13 Ethical implications

Ethics is the system of moral principles, rules and code of conduct, In order to maximize the return rate of questionnaires and to get reliable data or information (Cooper, 1999). The study concentrated on privacy, anonymity and confidentiality of the respondents as follows.

The Researcher obtained approval from SAUT to avoid any harm to both the University and respondents.

The respondents were informed about the purpose of the study that was for a partial fulfillment for the requirements of MBA course. The knowledge obtained from these findings may sensitize the government to improve on how she manages working capital to improve service provision to the people of Tanzania

Respondents were assured of confidentiality to enhance getting accurate information and no name was written on the questionnaires and consent forms were required to be filled

4.1 Data Analysis Findings and Discussions

This chapter presents empirical findings and analysis basing on the data collected to come up with answers to the research questions. The chapter starts with financial ratio analysis of quantitative secondary data which is matched with a description of the directives of the legislature and other authorities to evaluate compliance. The analysis covers quick ratio, current ratio, payables deferral periods and receivable deferral periods. Correlation analysis was done to correlate working capital data and own income of LGAs in Mara. The analysis of responses from respondents has also been matched with legislature to evaluate compliance of LGAs with matters pertaining to sound working capital management.

4.1.1 Quick Ratios

This is the ratio which indicates how quickly the LGA can meet its short term obligations without relying on inventory. According to Pandey, (2004) an asset is said to be liquid if it can be converted into cash immediately or reasonably soon without loss of value. The following table presents the quick ratio findings as they were calculated from the financial statements covering a period of five years from 2008 to 2012.

Table 4.1 Quick Ratio

Quick Ratio Name of District/ Municipal Council	Funds realizable to one shilling of current Liability				
	2008	2009	2010	2011	2012
Musoma Municipal Council Tarime	1 1	1 1	0.32 1	1 2	1 N/I
Serengeti	2	1	2	1	2
Rorya	2	2	2	3	3
Bunda	2	1	1	3	3
Musoma District Council	2	2	2	3	3

N/I no information

The findings from the quick ratio table above indicate that on average the LGAs in Mara have excess quick realizable items than would be recommended. A quick ratio of beyond 1.5 to 1 might imply that the councils have idle and excess cash which may be used to invest in treasury bills or elsewhere to maximize own source revenue. Pandey, (2004) argues that treasury bills have almost risk free rate so the money so invested can't be lost. The findings indicate that if an LGA invests Tshs 465,500 for 91 days, she will get Tshs 34, 500 as interest (BOT, 2013). Therefore, if the LGA invests Tshs 500,000,000 for the same period, it may gain about Tshs 37,000,000.This is an indication that a stringiest credit policy of within 90 days between the suppliers and LGAs would be helpful to encourage suppliers to grant free short term credit to LGAs.

The quick ratios findings indicate that the councils may have relaxed policies on the levels of quick current assets items. Reading from the table, one may find that there is no a constant level of these items. Sometimes the quick ratio is below 0.5 to 1 and some time it is above 2 to 1. A quick ratio of below 0.5 indicates a very dangerous illiquid financial status because if the creditors put pressure for their repayment, respective

councils would probably face operational difficulties.

4.1.2 Current Ratio

Current ratio is the ratio that indicates a relationship between current assets and current liabilities. It indicates how the LGA can meet and cover its short term obligations by using its current assets. According to Pandey , (2004) the current ratio of 2 to 1 is considered satisfactory because not all current assets would be sold and used to pay the obligations of the LGA to outside parties. Some more current assets would remain with the LGA for operational activities

The following table indicates the current ratio findings calculated from financial statements of the LGAs in Mara region for a period covering five years from 2008 to 2012

Table 4.2 current Ratio

Current Ratio	Funds realizable to one shilling of current Liability				
District/ Municipal Council	(Current Assets)/Current Liabilities				
	2008	2009	2010	2011	2012
Municipal Council	1	1	0.34	1	1
Tarime	1	1	1	2	N/1
Serengeti	3	2	2	2	2
Rorya	2	2	2	3	3
Bunda	2	1	1	3	3
Musoma Rural	2	2	2	3	3

N/I means no Information

Looking at the current Ratios findings in the table above it indicates that the quick ratios are almost in the same proportions with the current ratios. This may mean that the LGAs in Mara are not investing much in inventory or the suppliers are not confident to supply materials on short term credit terms. This is not a good indication as the LGAs are losing the opportunity of being financed by external interest free funds. Having good reputation to be financed externally is good because the LGAs can't be sure of being able to buy the supplies in cash at all times (Pandey, 2004). Being financed externally increases the chances of using internal cash to invest in safe securities to maximize own source income and liquidity capacities of the LGAs

The findings indicate the room for the LGAs to issue municipal bonds to maximize own source income. This is because the money raised from these bonds may be invested in treasury bills to earn risk free interest. The LGAs may adopt a strategy of paying a small interest to the bond holders and to earn a little bigger interest from the treasury bills. Municipal bonds are not subject to income tax in United States of America and so the government of Tanzania may use the same strategy to encourage purchase of these bonds by individuals from respective LGAs. Brigham & Houston (2006) argues that under U.S. tax laws, interest on local government bonds, called municipals or "munis," is not subject to federal income taxes.

The opportunity pointed out above indicates more chances of the LGAs to maximize own revenue because the bond holders may use the interest gained to invest in several companies to produce more goods and services for the community. At last those portions of gains from those investments would be paid back to the LGAs as service levy to maximize own revenue.

Applying this strategy implies that cash circulation would be increased if the LGAs would use and apply sound working capital strategies.

4.1.3 Payable deferral Periods

This is the average length of time between the purchase of material and labor and payment of cash for them (Brigham & Houston, 2006).… It is how long the LGA can delay in paying back some money to the creditors. For example, it may take the firm thirty days, forty days or sixty days to pay back to the suppliers of inventory.

It is advisable to slightly extend the duration we use to pay the creditors comparing to how we may set the policies of collecting receivables.

Brigham & Houston, (2006) argue that the cash conversion cycle may be shortened by reducing the receivables collection period by speeding up collections and lengthening the payables deferral period by slowing down the firm's own payments.

The following table indicates how the LGAs in Mara on average delay in paying back to Creditors

Table 4.3 Payables Deferral Periods

LGA	(Payables)÷(Annual supplies/365)				
	2008	2009	2010	2011	2012
	Days	Days	Days	Days	Days
Municipal Council	N/I	92	250	311	206
Tarime	79	114	99	206	N/I
Serengeti	250	204	190	75	140
Rorya	33	126	126	67	42
Bunda	122	497	187	59	66
Musoma Rural	211	175	149	80	90

N/I means no information

According to the findings in the table above, most LGAs in Mara region have on average discouraging deferral periods for their accounts payables. Most of them use between 90 and 300 days to pay back to suppliers. This is not a good indication because suppliers' inventory turnovers might be small to enable them get enough profit to cover their operational expenses. Inventory turnover show how rapidly the inventory is turning into receivables through credit sales. High inventory turnover indicates good inventory management and low inventory turnover indicates bad inventory management (Pandey, 2006).

According to the financial statements of the LGAs, there is a need of huge supply of inventory in amounts, which may threaten financial position of respective suppliers. In order for a small company to agree to make supplies to the LGA it needs a substantial capital which may cause the LGA to be a sole customer to the supplying company. The policy that would be used by these LGAs to rescue the situation would be to stick on strict credit policy of not more than 90 days to make repayment to suppliers. Brigham & Houston (2006) argue that the cash conversion cycle must be shortened to optimize the working capital management. This can be done by reducing the receivables collection period by speeding up collections and somehow to lengthen the payables deferral period, by slowing down the firm's out payments to the extent that these actions can be taken without increasing costs.

4.1.4 Receivables deferral periods

This is the average period of time spent to collect receivables from debtors. According to Pandey, (2004),. the average collection period measures the quality of debtors since it indicates the speed of their collection. According to (Pandey, 2006), the shorter the average collection, the better the quality of debtors since a short collection period implies prompt payments by debtors.
The following table shows the results of receivable deferral periods of the LGAs in Mara region

Table 4.4 Receivable deferral Period
Receivables Deferral Period

LGA	(Receivables)÷(Own Source Income/365)				
	2008	2009	2010	2011	2012
Municipal Council	N/I	132	37	54	16
Tarime	33	336	135	4	N/I
Serengeti	122	455	111	20	17
Rorya	41	1120	963	543	51
Bunda	4	335	465	52	0
Musoma Rural	112	634	193	54	47

N/I means no information

According to the findings, one may say that the councils in Mara are striving at making strict receivables collecting policies. Other LGAs have an average of 4 days to collect receivables in a year. The findings indicate that there is still a need to improve these policies to the tune of at least 30 days. Delaying too much to collect revenue in the tune of 455 days does not match with a requirement to meet 90 days to make repayments to creditors. Pandey, (2004) argues that the optimum credit policy is the one that maximizes the firm's value. The firm's value is maximized when incremental rate of return of an investment is equal to the incremental marginal cost of funds used to finance the investment. Pandey (2004) argues that as the LGA loosens its credit policy, its investments in accounts receivables becomes more risky because of increase in slow paying and defaulting accounts.

If the LGA delays too much to collect its receivables it may not be able to purchase inventory to finance operational activities

4.2.0 Karl Pearson coefficient of correlation

Karl Pearson coefficient of correlation checks whether there is any causal relationship between the variables (Kothari, 2004). The coefficient checks whether the two variables are causally related which means that one variable is dependent and the other independent.

This section gives the findings on Karl Pearson correlation analysis which was done to find out any relationship between the determinants of sound working capital and own income of the LGAs in Mara. All the variables; quick ratios, current ratio, receivables deferral periods and Payables deferral periods were checked to see if there is any correlation between them and own income of LGAs. Below is the table that summarizes own income of LGAs in Mara for the period of five years from 2008 to 2012.

Mara Region LGAs own income in Millions					
	2008	2009	2010	2011	2012
Municipal		670.37	670.37	459.49	1,039.72
Tarime	604.13	743.51	1,018.20	1,506.49	-
Serengeti	182.62	377.42	587.95	615.38	819.55
Rorya	72.38	107.01	116.25	210.58	282.99
Bunda	346.63	451.59	455.35	350.56	939.05
Musoma Rural	209.79	246.12	263.72	339.33	504.41

4.2.1 Correlation between receivables deferral periods and own income

This section gives findings on the analysis of secondary data to find any relationship between days receivables remain outstanding and own income. A total of 27 pairs of values were examined and the findings are as follows

Table 4.5 Correlation between receivables deferral periods and own income

Item	Description
Number of pairs in the analysis	27
Independent Variable	Days Receivables remain outstanding
Dependent Variable	Mara LGAs own income
Coefficient of correlation	-0.44

Reading from the table one can see that there is a negative relationship between days receivables remain outstanding and own income. The findings indicate that it is recommended to minimize the days of receivables to maximize own revenue. As Pandey, (2004) argued; if the LGA loosens its credit policy, its investments in accounts receivables becomes more risky because of increase in slow paying and defaulting accounts.

4.2.2 Correlation between payables deferral periods and own income

This section gives the findings of relationship between payables deferral periods and own income of the LGAs in Mara Region. 28 eight pairs of items were analyzed to give the findings as below

Table 4.6 Correlation between payables deferral periods and own income

Item	Description
Number of pairs in the analysis	28
Independent Variable	Days Payables remain outstanding
Dependent Variable	Mara LGAs own income
Coefficient of correlation	0.1

Reading from the table one can see that there is a small positive relationship between days payables remain outstanding and the own income of LGAs. It indicates that if an LGA extends repayments back to creditors relative to how it delays collecting receivables, it may maximize own revenue. Brigham and Houston,(2006) confirms this argument by indicating that it is wise to reduce the receivables collection period by speeding up collections and somehow to lengthen the payables deferral period by slowing down the firm's out payments to the extent that these actions can be taken without increasing costs.

4.2.3 Correlation between current ratio and own income

This section gives the findings of relationship between current ratios and own income. A total of 29 pairs of

items were analyzed and the findings are as follows

Table 4.7 Correlation between current ratio and own income

Item	Description
Number of pairs in the analysis	29
Independent Variable	Current ratios
Dependent Variable	Own income
Coefficient of correlation	-0.34

Reading from the table one can see that there is a negative relationship between current ratios and own income. It shows that if the LGAs reduce their current ratios to the tune of 2 to one, it may maximize own revenue because idle money would be invested to earn more revenue. As Brigham and Houston, (2006) once argued, idle money may be invested in municipal bonds to maximize own revenue.

4.2.4 Correlation between quick ratio and own income

This section gives the findings about the relationship between quick ratios and own revenue of LGAs in Mara region. 29 items were analyzed and the findings are summarized as follows

Table 4.8 Correlation between quick ratio and own income

Item	Description
Number of pairs in the analysis	29
Independent Variable	Quick ratios
Dependent Variable	Own Income
Coefficient of correlation	-0.29

The findings indicate that there is a negative relationship between quick ratios and own revenue. This means that if the LGAs will have excessive quick ratios beyond the recommended 1 to 1, the own revenue will decrease

4.3.0 Relationship between independent variables and liquidity capacities of LGAs

Basing on Wood, (2002) arguments that liquidity is being able to pay LGA's debts as they fall due and Shapiro, (2006) that money provides liquidity as one can use it to purchase goods and services, and Pandey, (2004:4) that an LGA needs to have an optimum capital structure to mix debt and equity in its capital structure; the researcher is in the opinion that own income and liquidity capacity come into existence at the same time concurrently. When you have income you already have liquidity to pay for your obligations, operational activities and financing activities. From this argument, liquidity capacities of the LGAs cannot be correlated with the independent variables. The outcomes that have been obtained with LGAs own incomes are the same outcomes that can be inferred with LGAs liquidity capacities

4.4.0 Qualitative data

This section presents the findings of qualitative data collected from the questionnaires that were sent to the respondents. The questionnaires were sent to all district councils. Respondents were interviewed personally, telephonically, by post mails and by electronic mails. Most of the questions were answered to find out opinion of respondents. Information was interpreted by analyzing the responses against legislation setting and available literature using descriptive statistics analysis

4.4.1 Categories of respondents

There were two main categories of respondents. Finance department officers in Mara region and external auditors.

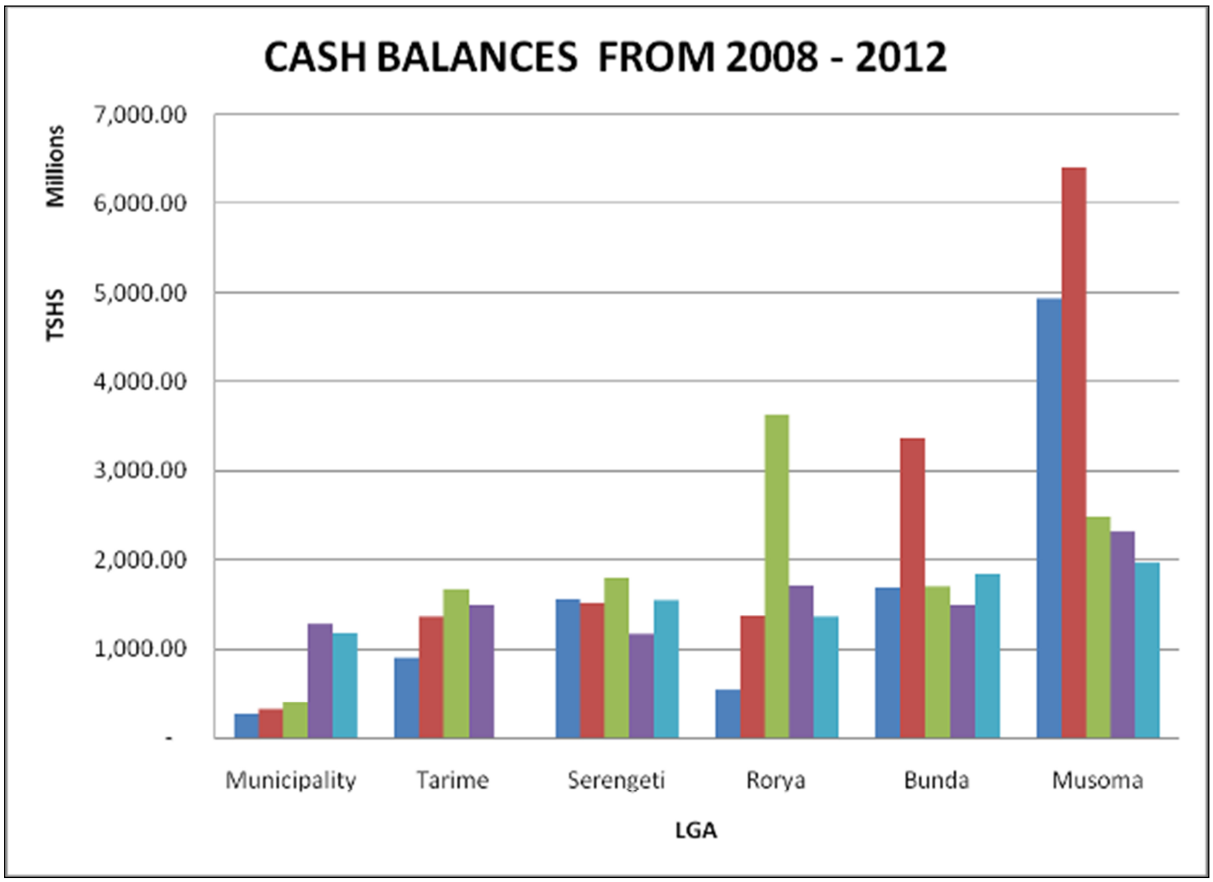
4.4.2 Response Rate

A total of 66 questionnaires were distributed to the targeted respondents and 42 were returned the same as 63%. All financial statements covering a period of five years from 2008 to 2012, except for Tarime 2012, were found for analysis. This percentage was found valid for analysis according to (Kothari, 2004:120) regarding survey studies.

4.4.3 Cash balances from the financial statements

The councils are meant to provide timely and in the budgeted year all the intended services to the community. Delaying too much to implement the activities intended for the council goes against the best practice of cash management. Pandey, (2006) argues that most people have subjective preference for present consumption over

future consumption of goods and services because of risk and inflation. The amount of goods or services to be purchased today may not be the same if we use the same amount of money in the following year.
The following chart indicates the cash book balances as were found in the LGAs financial statements.
Chart 4.1 Cash balances of Mara LGA



Source: Field Data, 2013

The histograms above indicate the cash balances of the LGAs from the year 2008 to 2012. Each histogram represents a yearly cash balance of a respective LGA.

These funds balances remaining may seem unpleasant because the funds could have been used to provide the intended service to the community. These huge cash balances may imply that the LGAs are not exploiting opportunities of playing with debtor creditor relationship to maximize own income and liquidity capacities

The reasons that were given for these cash book balances were as follows:
Late disbursement of the funds from the treasury and other foreign donors for the projects to be implemented; that these fund releases are done almost at the end of financial year
Different nature of contracts caused some money to remain in the council bank accounts as retention money
Environmental factors and unexpected events like rainfall which causes some of the contracts to delay.

4.4.4 Idle cash investment in the Dar es Salaam stock exchange and other depositories

23.8% of respondents strongly agreed that idle cash investment in Dar es Salaam Stock exchange or in other depositories may be beneficial to the LGAs, 64.3% agreed but not strongly on the suggestion and 11.9% were neutral to the suggestion. The following table summarizes this report as follows

Table 4.9 Investments in Dar es Salaam Stock Exchange

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	10	23.8	23.8	23.8
	Agree	27	64.3	64.3	88.1
	Neutral	5	11.9	11.9	100.0
	Total	42	100.0	100.0	

Source: Field data 2013

According to PMORALG, (2010) the LGAs are required to invest money not required for immediate use. S. 52(1) of the Local Financial Memorandum instructs cash funds not required for immediate use to be invested to the best advantage of the local government authority, in accordance with the policy of the LGA and subject to any general and specific directives issued by the minister.

S.52 (4) of the Local Financial Memorandum orders such investments of other liquid funds for a short term period that is in economic ventures through the purchase of shares or contribution of capital shall be subject to formal resolution of the LGA and included in the development or recurrent budgets.

Section52 sub section 5 of the Local Financial Memorandum says such investments shall be evidenced by a security deed or contractual document which shall be entered in a register and kept under safe custody by the accounting officer.

As you can see, the LGAs are required not to stay with the funds not required for immediate use. These investments may have a positive influence to own source and liquidity capacities of the LGAs

4.4.5 Receivables deferral periods

As it was said before, this is the average period of time spent to collect receivables from debtors. Pandey, (2004) argues that the average collection period measures the quality of debtors since it indicates the speed of their collection. Looking at the table below 35.7% of respondents said that it takes 1 to 30 days to collect revenue from debtors,42.9% said it takes 30 to 40 days, 16.7% said it takes 40 to 50 days to collect revenue from debtors and 4.8% said it takes 60 to 70 days to collect revenue from debtors. Referring to table 4.4 one can see that to some extent these opinions match with those findings. But there were some LGAs in Mara which exceeded this period. For example Rorya district council had an average of 1120 days in the year 2009, 963 days in 2010 and 543 days in 2011. The researcher is in the opinion that this status goes against sound working capital strategies. These findings are summarized in the following table:

Table 4.10 Receivables deferral Periods

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 to 30 days	15	35.7	35.7	35.7
	30 to 40 days	18	42.9	42.9	78.6
	40 to 50 days	7	16.7	16.7	95.2
	60 to 70 days	2	4.8	4.8	100.0
	Total	42	100.0	100.0	

Source: Field data 2013

PMORALG, (2010) S.38 (2), indicates that all income shall be collected in advance of the service provided, or at the time of rendering the service. S. (3) where the LGA opts to collect revenue by agents it shall require such an agent to deposit in advance with the LGA three months installments of the annual amount agreement.

4.4.6 Aggregate stock order to minimize ordering costs

21.4% strongly agreed a suggestion that aggregate stock purchase may minimize the costs of inventory ordering costs, 61.9% agreed but not strongly with the suggestion, 7.1% were neutral and 9.5% disagreed with the suggestion. The following table summarizes these findings:

Table 4.11 Aggregate Stock order

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	9	21.4	21.4	21.4
	Agree	26	61.9	61.9	83.3
	Neutral	3	7.1	7.1	90.5
	Disagree	4	9.5	9.5	100.0
	Total	42	100.0	100.0	

Source: Field data 2013

Pandey (2004:626) argues that if the firm maintains large inventory levels, there will be few orders placed and ordering costs will be relatively small. This may be true especially if the LGAs will negotiate cash discount terms with their suppliers for bulk supplies to be purchased. If the LGAs will manage to buy the supplies at low cost the liquidity capacity will be maximized

4.4.7 Inclusion of Economic order Quantity in the Public procurement Act

19% of the respondents strongly agreed to include economic order quantity policy in the public procurement Act

to improve soundness of working capital management in terms of cost minimization, 54% agreed but not strongly that application of economic order quantity would be helpful to the LGAs, 21% were neutral to the suggestion, and 4.8% disagreed introduction of this policy. This report is summarized below as follows:

Table 4.12 Economic order quantity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	8	19.0	19.0	19.0
	Agree	23	54.8	54.8	73.8
	Neutral	9	21.4	21.4	95.2
	Disagree	2	4.8	4.8	100.0
	Total	42	100.0	100.0	

Source: Field data 2013

Pandey (2004:626) argues that the LGA needs to determine the optimum order size which will minimize both ordering and holding costs.

The researcher is in the opinion that economic order quantity may be helpful for the LGAs to optimize liquidity capacities and own source income. The saved cost will be used for investments to maximize own revenue

5.0 CONCLUSION AND RECOMMENDATION

This section concludes the paper. It has been organized in two major sections which are the conclusions and recommendations

5.1 Conclusions

Basing on the analysis done from questionnaires , ratio analysis of LGAs financial statements and Karl Pearson correlation; it is evident and can be concluded that there is a negative relationship between sound working capital data and the amount of own income and liquidity capacities of a municipalities. If appropriate working capital strategies are being used to minimize the days debtors remain outstanding and to minimize levels of current assets the result will be to maximize own source revenue and maximize liquidity capacities of LGAs. It has been seen from the analysis that some LGAs in Mara had excessive cash and other aspects of working capital. From this it is evident that appropriate sound working capital policies for the LGAs to apply are quick ratios of not more than 1 to 1, current ratio of 2 to 1, receivables deferral period of within 30 days and payables deferral period of within 90 days.

It is also evident that if the LGAs have working capital strategy of matching their current assets and liabilities, it may maximize the amount of LGA own source income. In applying this strategy, the LGAs may have an opportunity of introducing Municipal bonds which are performing better in United States of America to maximize own source revenue. It is also clear from current and quick ratios that the LGAs have always idle external and internal funds which may be invested in treasury bills and short term marketable securities to maximize own source income.

Sound working capital strategies may influence LGA liquidity capacities due to its ability of being able to pay short term obligations operational activities and financing activities as they fall due

5.2 Recommendations

More research to be done in this area especially the government to take interest in this matter to conduct a national workshop to congregate all financial officers to have a discussion on how to improve and maximize liquidity capacities and own income of LGAs

The LGAs to consider introduction of municipal bonds to increase debtor creditor relationship and at the same time maximize own source revenue and liquidity capacities

The LGAs to be result oriented. That is to use the money so collected in capital expenditure to build structures to encourage the businessmen to comply with those requirements of paying service levy.

LGAs to initiate more sources of own revenue for example bed fees to tourists when visiting game reserves

LGAs to establish stronger and convenient controls and policy on cash collection all the stake holders to comply with bylaws of respective councils for matters relating to working capital management

To avoid political interference for matters pertaining to collection of tax and other levies

Avoiding excessive cash and funds to be used according to the LGA approved budget The government to conduct in house training to enable the accountants and external auditors to understand directives and financial guidelines from the Local Financial Memorandum.

For Receivables

For receivables, the LGAs need to collect them as soon as possible to enable liquidity to pay operation costs and accounts payables. Stringiest credit policy of at least 30 days needs to be set to achieve this goal

To reduce time taken to invoice the debtors and to take immediate legal action to slow payers.

To reduce time required to make a contract between the LGA and the prospective collecting agents. In this way receivables will increase and hence own revenue

To prepare debtors statement of accounts on a monthly basis and results to be reported to both the LGAs managements and the debtors. This is to stabilize communication and awareness and to check for possible errors.

To consider paying commission to revenue collectors and finance departments in general to motivate them to collect at maximum capacities.

To apply cash discounts to the debtors who pay early to speed up cash inflows

To encourage the debtors to pay directly to the LGA bank account to reduce follow up costs and increase efficiency.

For Payables

The LGAs to pay back their bills on predetermined dates to maintain relationship with their suppliers

If there is insufficient cash the LGA is advised to pay in small amounts to encourage constant supplies.

To stabilize relationship and reputation with creditors, the LGAs need to comply with the terms they agree to pay back account payables and not more than a specified duration. Further, to maintain contacts with suppliers to build confidence and trust that the obligations will be paid.

For Inventories

Keeping records to ensure avoidance of obsolescence. First in first out inventory approach is advised to be used.

To perform a critical path analysis to identify the activities that need to be done immediately and which need some kind of delay to identify what needs to be ordered first and what to be ordered next.

Appropriate balances of stock should be maintained to minimize holding costs

LGAs to negotiate discount terms by buying supplies in big quantities to reduce the costs of buying these supplies.

Balanced inventories are important, not too high and not too little levels, because many LGAs rely on their stocks of items to provide service to the community. A balance of the same is important to enable the LGA to run its operations. This may be achieved by the LGAs to assess and order the quantity which optimizes both ordering and holding costs (Economic Order Quantity)

The LGAs to dispatch and issue supplies like school books and other teaching aids immediately to reduce unnecessary stock holdings

REFERENCES

Ali, S. (2011) Working Capital Management and Profitability of the Manufacturing Sector, A case Study of Pakstan's Textile Industry, The Lahore Journal of Economics,16(2):141-178

Atrill P. (2006), 'Financial Management for Decision Makers' (4th Ed). Financial Times Prentice Hall

Azam, M. (2011) 'Impact of Working Capital Management on Firms' Performance': Interdisciplinary Journal of Contemporary Research in Business, 3(5)

Baig V. A. (2009) 'Working Capital Management: A Comparative Study of Different Ownerships', Management & Change, 13(2)

Bank of Tanzania: Financial Markets,2013, viewed on 15/.6/2013 available at www.bot-tz

Brigham, E.F & Houston, J.F (2006), 'Fundamental of Financial Management', Thomson Business Information

Business Experts: Training Benefits, 2011, viewed on 22/05/2013 available at www.businesstrainingexperts.com/preview/training_benefits.htm

Chowdhury A. & Amin M. (2007),'Working Capital Management Practiced in Pharmaceutical Companies Listed in Dhaka Stock Exchange', BRAC University Journal, Vol. IV (2): 75-86

Copper, (1999) Ethical Implication, Michigan, USA

Denzin, N. K., & Lincoln, Y. S. (2011). The SAGE Handbook of qualitative research (4th ed.). Los Angeles: Sage Publications.

Dickson, R. (1991), Financial Management, Longman

Gill A., Biger N. & Mathur N. (2010),' The Relationship Between Working Capital Management And Profitability: Evidence From The United States', Business and Economics Journal, Volume 2010

Harold, B. J.R & Seymour, S (2003), 'Financial Management for Decision Making', Washington, DC, Beard Book

Hornsby A.S (2004), 'Oxford Advanced Learners', New York' University Press

International Public Sector Accounting Standards (IPSAs): Presentation of Budget Information in Financial

Statements, 2006 December, viewed on 19.05.2013 available at https://www.ifac.org
Kinner & Taylor, (1996),' Research Design, New York', Longman
Kothari, C.R (2004), Research Methodology, New Delhi, New Age International Publishers
Kwame, K. (2007). 'Working capital management practices of small firms in the Ashanti region of Ghana'. Retrieved from http://www. ssrn.com on January 2010.. Cited by Nyabwanga
Lamberson, M (1995). 'Changes in Working Capital of Small Firms in relation to changes in economic activity', Mid- American Journal of Business, 10(2), 45-50.
Lisa, M. (2008), 'The Sage encyclopedia of qualitative research methods', Los Angeles, Calif.: Sage Publications.
Maharaj, J.R (2012),' Research paper on The effect of good working capital policy on exploiting the fiscal capacity of Municipalities in KZN,' Research Work, University of South Africa, South Africa
Mojtahedzadeh V., Tabari S. H. A. Mosayebi R.(2011),' The Relationship between Working Capital Management and Profitability of the Companies (Case Study: Listed Companies on TSE)', International Research Journal of Finance and Economics, Issue 76
Nazrul, (2012), Working Capital Investment and Financing Policies of Selected Pharmaceutical Companies in Bangladesh, Research Journal of Finance and Accounting,3(4)
Nyabwanga, R.N Ojera, P.,Lumumba M.,Odondo, A.J Simeyo, O.(2012) Effect of working capital management practices on financial performance: A study of small scale enterprises in Kisii South District, Kenya,African, Journal of Business Management, 6(18):5807-5817
Pandey I.M (2004), Financial Management, Ninth edition, New Delhi, Vikas Publishing House,
PMORALG (2010), Local Authority Financial Memorandum, Dar es Salaam, Government printer,
Polity, (2011) Statement by Terrence Nombembe, Auditor- General, on municipalities in KZN (29/06/2011) . South Africa: Creamer Media. Cited on 03.11.2012
Ross W. & Jaffe J. (2007) ,'Corporate Finance', London, McGraw- Hill,
Saad, N.M (2010),' Working Capital Management: The Effect of Market Valuation and Profitability in Malaysia', International Journal of Business and Management ,Vol. 5(11)
Shapiro A. C (2006), Multinational Financial Management, eighth edition, New Delhi, John Wiley & Sons INC,
Sorensen, H. T., Sabroe S. & Sen J.C (1996) 'A Framework for Evaluation of Secondary Data Sources for Epidemiological Research', International Journal of Epidemiology, 25(2)
United Republic of Tanzania:, Annual General Report of the Controller and Auditor General on the Financial Statements of Local Government Authorities for the Financial year ended 30th June, 2011, Viewed on 16/05/2013 available at www.nao.go.tz
United Republic of Tanzania:, 'The Controller and Auditor General's Report on the Financial Statements of Local Government Authorities', 2006, viewed on 15/05/2013 available at www.nao.go.tz
UK Business Information: The Benefits of In house training, viewed on 22/05/2013 available at www.business-information-uk.com/in-house-training.html
United Republic of Tanzania: Local Government Finance Information, visited on 25.10.2012, available at http://www.logintanzania.net/,
United Republic of Tanzania: Local Government Finances Act, 1982, viewed on 15/05/2013, available at www.logintanzania.net/docs/act9_1982.pdf,
Valipour, H. Moradi, J. and Farsi, F.D (2012) 'The Impact of Company Characteristics on working Capital Mangement', Journal of Applied Finance & Banking, vol.2, no.1, 105-125
Wilkinson, D. (2000) 'The Research tool Kit,' London, Routledge Falmer
William L. (2010),' Practical Financial Management'.,South-Western College Pub;
Wood F. & Sangster A. (2002), Business Accounting, 9th edition, Edinburgh, Pearson Education Ltd
Yiadom E.M & Agyei S.K (2006), 'Working capital management practices of small scale enterprises in the central region of Ghana', Asian Journal of Business and Management Science' 1(4) [29-47]
Zelman et al, (2008), Financial Management of Health Care Organization, London Blackwell Publishing Ltd

Appendices

Appendix 1. BUDGET

This section explains the budget of conducting research as well as a time table for conducting research from data collection, data analysis up to report writing.

Budget

Number	Item	Budget Tshs
1	Travel	240,000.00
2	Printing & Photocopying	840,000.00
3	Telephone	100,000.00
4	Computer Buying	600,000.00
5	Consultation fee	100,000.00
6	Food & Refreshments	120,000.00
	Total	2,000,000.00

W2= Week 2

Appendix 2

Questions to be answered by Finance Department and External Auditors

Your Position……..

Your Educational Level…….

Work experience in years…….

Creditors Outstanding at the year end

2008	2009	2010	2011	2012

1.1 Is there any policy for making early payments to take advantage of discounts?

……
……
……
……
……..

2.0 Cash

2.1 . Balances

2008	2009	2010	2011	2012

2.1.2 . Reasons for significant changes in annual balances, if any.

……
……
……
……
……

3.9. In your opinion, what are the main concerns surrounding the collection of cash from services levy and other own source revenue in general.

……
……
……
……
…….

Working capital policies

4.1 Cash investment in the Dar es Salaam stock exchange or in other depositories will be beneficial to the LGAs as it will increase own source revenue

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

How long does your entity delay in collecting revenue from the council debtors

1 to 30 days	30 to 40 days	40 to 50 days	50 to 60 days	60 to 70 days

4.3 Ordering stocks in aggregates may be helpful to the LGAs as minimum funds will be used to procure the consumables compared to how it could be if the inventories were ordered in small amounts

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Inclusion of an Economic Order Quantity policy in the Public Procurement Act will improve the soundness of managing working capital in terms of cost minimization

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

RESEARCH TIME TABLE

Activity	February 2013				March 2013				April 2013				May 2013			
Researcher Introducing himself																
Data Collection																
Data analysis																
Report writing																

Appendix 4
A RESPONDENT CONSENT FORM
Dear Respondent
I want to thank you for taking time to meet with me today.
My name is Marwa Samwel an MBA student from St Augustine University of Tanzania.

I would like to talk with you about your experiences as an officer of Mara Region for matters pertaining to management of working capital. The interview should take less than a half an hour. I will be taping the session because I don't want to miss any of your extra comments.

All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent. Remember, you don't have to talk about anything you don't want to and you may end the interview at any time.

Please put Yes or No at the appropriate space
……. I am willing to participate in this interview
…….. I am not willing to participate in this interview
Place of interview……..
Date of interview……
If sent by post please return before date……..

Appendix 5 Karl Pearson's Coefficient of correlation

N	Independent Variable X	Dependent Variable Y	XY	X^2	Y^2

$$\frac{n\Sigma xy-\Sigma x\Sigma y}{\sqrt{(n\,\Sigma X^2-(\Sigma X)^2)}\,\sqrt{(n\,\Sigma Y^2-(\Sigma Y)^2)}} = r$$

Where ‘r ' is Karl Pearson correlation coefficient

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
http://www.iiste.org

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library , NewJour, Google Scholar