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CASH MANAGEMENT STRATEGIES AND FIRM PERFORMANCE IN PARASTATALS: A CASE OF CIVIL AVIATION AUTHORITY OF ZIMBABWE.

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ABSTRACT

The study focused on the impact of cash management strategies on the financial performance of CAAZ, by evaluating the cash management techniques which are implemented by CAAZ, and Cash Conversion Cycle levels. The literature reviewed was centered on cash management practices and strategies which are implemented by companies and their impact on business performance. The research was both descriptive and qualitative in nature, hence the researcher opted for the mixed approach that of using both quantitative and qualitative methods, to better capture, describe and explain the complex cash management strategies and the business performance. A sample of 36 respondents was selected through the use of stratified random sampling. The total number of questionnaires sent was 36 and the response rate was 92%. The data collected through questionnaires and secondary data from financial reports were presented, analyzed and interpreted in chapter four through the use of Epi Info system, Microsoft Excel and descriptive statistics. Correlation and coefficient of determination were carried out on the data to determine the relationship between components of cash management and financial performance. Presentation of the findings was in the form of tables, pie charts, line and bar graphs. The study established that liquidity or cash flow had a positive impact on the financial performance of the company It is recommended that the CAAZ should tighten its credit policy implementation and ensure cash collection improves to shorten the cash conversion cycle. CAAZ should adopt cash management strategies that include electronic e-commerce business platforms that allow its customers to access their ledger accounts from wherever they are. The study further recommends strategies CAAZ should implement systems that determine the optimum cash balances and plans to invest the excess cash so that it improves the business performance.

Key Words: *Cash, Management, Strategies, Firm performance, Parastatal*

INTRODUCTION

All over the world, there is no business operation that is isolative of cash management (Randall and Farris, 2009). Cash is seen as the "life blood" of every business organization and the most vital asset required on day to day operations of the business. Basically today, cash management has been significantly justified by the growing developments in the world of business over the years (Nwarogu, 2017). These developmental strides include; changes in the corporate banking relationship from buyer's to a seller's market, globalization of businesses which saw the creation of the Economic Monetary Union (EMU) in Europe, and the proposed adoption of a single currency in the West Africa region (Nwarogu, 2017).

Nwarogu (2017) also indicate that, apart from the fact that cash is the most current asset, it is also seen as the common denominator to which all current assets can be reduced. All liquid assets, such as inventories, receivables and marketable instruments will all be converted to cash eventually. A large number of business failures have been attributed to inability of financial managers to plan and control properly the current assets and current liabilities of their respective firms (Gakure, 2012). CAAZ has been singled out as one of the parastatals that have challenges in servicing its interest borrowing and the Auditor General's reports from year 2015 expressed doubt of going concern for this parastatal.

In today's business world, one issue faced by finance managers in managing cash is the determination of an appropriate source of fund either for the purpose of initial take off of the business or for the purpose of its working (Gakure, 2012). This can ensure that an otherwise profitable business has access to the cash it needs to meet its ongoing obligations (Afza, 2009). (Afza, 2009) said that the corporate finance literature has traditionally focused on the study of long-term financial decisions, particularly investments, capital structure, dividends or company valuation decisions. However, short-term assets and liabilities are important components of total assets and need to be carefully analyzed. Again so much has been written on long term investment and financing decisions (Hamza, 2015). However, short term investment assets, has attracted less attention, particularly there is less attention to cash (liquidity) management and its significance to business management practices (Nwarogu, 2017).

Management of these short-term assets and liabilities warrants a careful investigation since cash is a critical aspect of working capital management which plays an important role in a firm's profitability Smith, (1980) quoted by Afza, (2009). The researcher is therefore prompted to carry out a research on cash management practices and business financial performance in aviation companies in Zimbabwe using a case study approach.

STATEMENT OF THE PROBLEM

Cash management is something all the companies need to consider. Good capital management practice always ensures that cash available in the business always exceeds its current liabilities, otherwise the business risks having working capital deficit (Mugo, 2013). CAAZ has been reported to be one of the parastatal that almost operate lacking going concern due huge current liabilities versus current assets. The company's debt is continuously increasing and it is failing to service the current portion of the loans due for payment since dollarization in 2009. More than 90% of the debtors go beyond 120 days. The problems seemed to be dragging from year 2009 and the debt burden is still substantial.

RESEARCH OBJECTIVES

- To identify and analyze the various cash management techniques used by Civil Aviation Authority of Zimbabwe (CAAZ).
- To establish the relationship between cash management techniques and performance of CAAZ
- To examine the Cash Conversion Cycle on the financial performance of CAAZ.

RELEVANCE OF THE STUDY

The study contributes to the literature in the following respects. It increases the awareness of the changes in the best cash management practices of firms in aviation industry and parastatals. The study shall enable the key stakeholders to know the effects of cash management strategies on financial performance in parastatals. The study would also help the management of parastatals to know not only the effect of cash management practices have on financial performance but also the various cash management practices that are of importance in tracking financial performance. The study would also be helpful to relevant stakeholders in the aviation sector.

RESEARCH METHODOLOGY

The study adopted the mixed approach as supported by Creswell and Clark, (2012), because using only quantitative or qualitative has weaknesses of failing to capture, describe and explain complex effects of cash management practices, strategies and financial performance. The study used both analytical and descriptive methods. A descriptive survey research design sought to give a descriptive position on the topic of the research and it covered all aspects and areas of interest concerning the research. It is used to identify and obtain information on cash management practices and strategies being implemented. It also answered questions such as, what are the cash management techniques used by CAAZ?. What are the investing strategies being pursued by CAAZ?. What is the level of cash conversion for cash (operating cycle) for CAAZ? A case study involved gathering of detailed information with a view of obtaining in depth information on CAAZ financial operations with regards to cash management. In summary triangulation was used to carry out the research in order to reduce bias. As such, the research mainly used survey questionnaires and interviews to obtain the required data. The collected data was presented using ratios, pie charts, bar graphs and regression statistical analysis. The results of the research were analyzed using Epi Infor system and Excel for decision making.

LITERATURE REVIEW

Theoretical Framework

The theoretical framework of this study was organized around theoretical base from different existing sources, such as books, articles, studies, and websites. The theoretical base is related to working capital management, cash management practices, cash management models and cash conversion cycle. These theoretical substances are strongly related to the research objectives of this study, because the aim of the study is to identify cash management practices practiced in and their impact on business performance.

Financial theory of cash management

In finance theory, scholars are interested in finding out how cash together with all other liquid assets influence firm value and the optimal capital structure of a firm (Nwarogu, 2017). The theory considers cash management problems in the framework evaluation and in the financing mode of a firm. Cash management is a characteristic of liquidity management however this can be achieved by adding cash balances to financial theoretic models, such as the Capital Asset Pricing Model (CAPM) or the Modigliani Miller (M&M) model (Van-Horne, 1994].

Cash Flow management

Cash from operations will determine the ability of a business to run its activities. Business experiencing poor cash may not survive longer (Nobanee, 2014). Nwarogu, (2017) concluded that the positivity of internal cash generation will determine a business financial power. Proper cash flow management needs to be constantly done by businesses to be able to maintain a positive cash flow, by making sure it monitors the in and out movement of cash in the business. Cash flow management is important in achieving operational objectives because it plays a key role of maintaining the business in the most efficient and effective manner possible.

Businesses that do not generate a positive cash flow will not stay in business and will not survive in today's business environment (Mugo, 2013). Hamza, (2015), in his study revealed that SME financial performance is positively related to efficiency of cash management. The study concluded that cash management practices have influence on the financial performance of SMEs, hence there is need for managers to embrace efficient cash management practices as a strategy to improve their financial performance and survive in the uncertain business environment. This is also supported by Hurdon (2001) quoted by Danjuma et.al, (2015) who concluded that, cash management involves proper management of cash flows, proper cash amount is kept for transactional motive. The researcher assessed whether this is true for aviation parastatal company.

Cash Management Models

There are several theoretic models in financial literatures providing the explanations to the cash management decisions that included but are not limited to trade-off model, pecking order model and free cash flow model (Zhang, 2011).

- **Trade-off Model.** Trade-off model demonstrates that firms decide their optimal level of cash holding by comparing the marginal cost and benefits of holding cash. Cash holdings reduce the likelihood of financial distress, lowered possibilities of the investment constrained by lack of financial resource and minimizes the cost of raising funds, however the cost of cash holdings is the opportunity cost of capital invested in liquid assets.

- **Baumol cash management model.** Ndiragu, (2014:11) said that Baumol Model treated cash management problem as an inventory management problem and he applied techniques developed for inventory optimization to the problem of covering transactions demand for cash. Having optimal cash balance basically involves a trade-off between the opportunity costs of holding too much cash and the transaction costs of holding too little cash. Lamberg and Salmin (2009) stated that the Baumol Model can be used to determine the target cash balance that a firm should hold at any given time. The optimal (target) cash balance is found where the opportunity costs equal the trading costs. The application of this model is comparable to the Economic Order Quantity (EOQ) model in stock control.

- **The Pecking order Model and Free Cash Flow Model.** Myers and Majluf (1984) argued that firms should finance the investment opportunities with internal generated funds, then with low risk debt and finally with equity to reduces the asymmetric information costs and other financial costs. Pecking order model suggests that cash acts as buffer between retained earnings and investment requirements. The free cash flow theory by Jensen (1986) claims that management have an incentive to pile up cash under their control and make the investment decision which might not be the best interest of shareholders. The basic elements of working capital management are based on speeding up collections and slowing down disbursements Kabeya, (2013).

Cash Conversion Cycle Management

Achieving higher turnover of inventory and receivables while extending the time period taken to pay non-interest-bearing current liabilities should allow a firm to operate with lower levels of outside debt and equity capital (Nobanee, and AlHajjar, 2014). CAAZ being a company in the aviation service industry do not sell any inventories hence this research likely to bring another model. The study by Ebben and Johnson (2011) investigated the relationship between cash conversion cycle and levels of liquidity, invested capital, and performance in small firms over time. They concluded that cash conversion cycle is found to be significantly related to levels of liquidity, invested capital, and performance.

Nobanee, (2014) said that cash management strategies are based on the traditional concepts of the operating cycle, the cash conversion cycle, the weighted cash conversion cycle and the net trade cycle. Nobanee, (2014), further defined the equation for cash conversion cycle is the age of inventory (inventory divided by cost of goods sold per day) plus the receivables collection period (accounts receivable divided by sales per day) less the payment deferral period (non-interest-bearing current liabilities divided by cash expense per day). A company may determine its own specific target values for the cash conversion cycle and current ratio. In this case it is desirable that the target values of the cash conversion cycle should fall within the recommended intervals of values for the defined indicator for different industries which are determined by the current ratio (Olga, 2015). The operating cycle can be shortened by retaining less stock, exercising stricter credit control over debtors or delayed payment of creditors (Roussow, 1996:239). Achieving higher turnover of inventory and receivables while extending the time period taken to pay non-interest-bearing current liabilities should allow a firm to operate with lower levels of outside debt and equity capital (Nobanee, and AlHajjar, 2014).

Accounts Receivables
Nso, (2018) said that companies must encourage prompt payment by Customers. In some firms customers are offered cash discounts for early payments. Most of the customers may get attracted to this discount offer; otherwise, the opportunity cost of not taking the discount would work out more than the benefits of holding the funds with them. Accounts receivables can be seen as assets of the firm or as loans given to customers by the company. When there is a build-up of receivables, funds are unavailable that could otherwise be put to more efficient use within the company and earn a return (Abioro, 2013). The credit arrow (figure 3.3) illustrates the time that it takes for the company to transform receivables into cash. After the delivery time, the time that receivables are tied up in can usually be divided into three categories which can be seen from the figure below. The first one is *concealed credit time* which is the time the company has given the customers to pay. The second is *authorized credit time*, which consists of the time between delivery of goods and invoicing. The last category is when *credit fall due* (Karlsson, 1996:17).

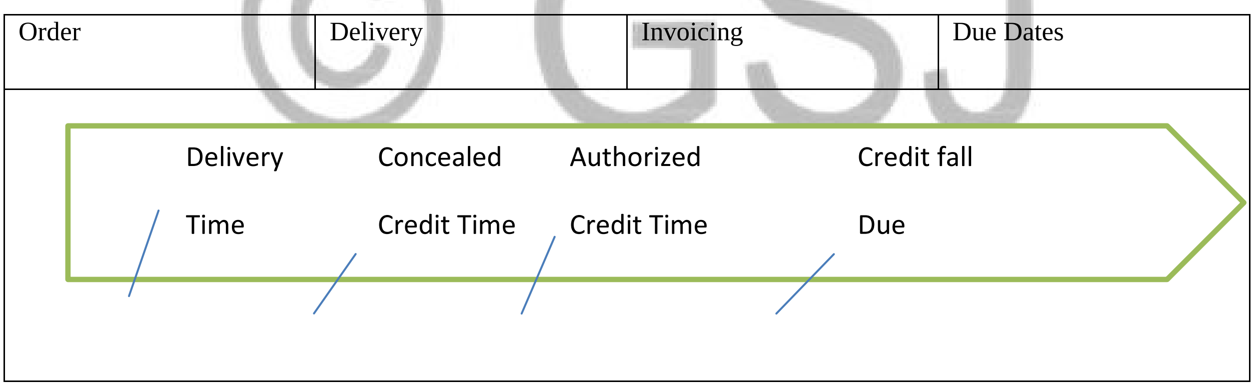

Figure 1: Accounts Receivable Credit Period, Source: adapted from Koulson, (1996:17)

Accounts Payables
Lamberg and Salmin. (2009) states that a company's short-term debt is very much influenced by the cash outflow and the major part of this outflow is made up by accounts payables. Accounts payables have many similarities with receivables and are mostly affected by changing the routines which can offer great savings for the company, usually in the form of interest and a reduction of penalty interest. Other step to improve the payment process is to try and keep company funds on an interest bearing account for as long as possible until payment to earn as much interest as possible (Dolfe & Koritz, 1999:54-57) quoted by Lamberg and Salmin, (2009). One way of monitoring accounts payables are by the days payables outstanding ratio (DPO) which measures how long it takes for the company to pay for its goods or services (Maness & Zietlow, 2005:37).

Inventory management
Lamberg, (2009) said that inventory management is one area which can significantly improve the cash flow of a company as it portrays pools of cash. One easy way of improving inventory management is to focus on sales forecasting and adapting a control system for this area. By accurately forecasting sales, inventory levels can be cut down and cash levels can improve. Lamberg, (2009) further identified several steps in improving a firms inventory

management. This included an analysis of the company's inventory levels in order to reduce its size. This means that the firm might be forced to accept a higher price for their inventory as their orders becomes smaller. Furthermore, slow-moving items needs to be identified and sold off to stimulate cash flow. Other steps include accepting more back orders which effectively reduces inventory levels. However, this is usually done on the expense of customer service and needs to be weighed against the benefits as it might be beneficial to other competitors.
Days Inventory Held (DIH) = Inventory / (Cost of sales/365)

Working Capital policy and Cash Management
Mugo, (2013) describes working capital policy categories Conservative policy, Aggressive policy and Moderate policy. Under the conservative policy, the company may prefer to hold rather heavy cash and bank balances in current account or investments in readily marketable securities, meanwhile with higher stocks of raw materials and finished goods, in the preparing for reducing the risks for out of the stock and loss of sales. Aggressive or restrictive working capital policy may result in a disproportionately losses by risks of stock outs and the consequential loss of production. A moderate policy is when the level of working capital will be moderate, neither too high nor too low, but just right.

Guo et.al (2014) said that cash management is one part of working capital management which usually concerns the different processes, procedures of handling a company's liquidity, monitoring and its planning. (Mugo, 2013) concluded that improving a company's cash management can result in better profit margins and higher turnover ratio which in turn can lead to higher profitability. (Akiyomi, 2014) has investigated the effects of aggressive working capital management on companies' financial ratios, and his findings suggest that accounts payable and cash flow per share measures have become more important in the financial management practices. Other strategies to improve liquidity can be done thorugh invoicing acceleration and collection processes (Mugo, 2013).

Liquidity of Business
Abioro (2013), said that liquidity is one of the most important goals of working capital management and central task of cash management. "A firm is liquid when it can pay bills on time without undue cost" (Maness & Zietlow 2005:25). Liquidity can also mean the extent to how quickly assets can be converted into money (Howells & Bain, 2005:587). Solvency and liquidity are two concepts that are closely related (sometimes used interchangeable?) and reflect upon the actions of company's working capital policy. As Maness and Zietlow have defined; "a firm is considered solvent when its assets exceed its liabilities" (Maness & Zietlow 2005:25). Why do firms need liquidity and how much liquidity is enough then? Costs and benefits for holding liquid assets have to be carefully weighed against the opportunity costs for holding more productive but less liquid assets.

Motives of Holding Cash
The main counter-argument for holding cash is usually connected with the low return it can offer. (Abioro, 2013), said that According to the economist, Keynes, there are three main motives for holding cash and however, there are advantages for having liquidity reserves and three widely used motives for holding cash include:

Transaction Motive: This is the major reason why corporate bodies hold cash. Cash is held in the ordinary course of business for day to day operation (Abioro, 2013). This motive requires a firm to hold cash to conduct its business. Companies hold cash for their daily expenses that is for paying salaries, materials and taxes etc. Cash acts as a buffer for the mismatch between cash in- and outflows.

Precautionary Motive: Cash is held to provide cushion or buffer to withstand unexpected emergency cash outflows. It is the need to hold cash to meet contingencies in the future. Cash held serves as safety margin against occasional unforeseen but compelling contingent payments in the future. Holding cash under this motive is to provide cushion to withstand unexpected emergency cash flows (Olowe, 1998).Future cash flows are uncertain and excess cash is hold to meet unexpected costs.

Trade Credit: Companies in need of additional working capital can use a trade credit that can serve as a liquidity reserve (Abioro, 2013). This is a credit which is connected to one of the company's account. Usually the company pays a yearly fee for the use of a trade credit and interest can be charged quarterly (Lamberg and Vailming, 2009). Other options should therefore be explored as means for short-term financing which offer lower costs for the firm. In contrast to high variation in the use of short-term loans and -investments, least variation is observed with the use of frequent invoicing, suggesting that invoicing practices to customers have remained very stable, very few companies have started to invoice more frequently (Abioro, 2013).

Leasing: Leasing is a popular way of financing which can be particularly suited for companies that are in an expansive phase and are operating under strictly limited financing. Companies can lease almost anything they need such as machinery and equipment but it can be an expensive form of financing. Leasing companies charge a periodic fee, usually quarterly and is set as a percentage of the total price. Naturally, leasing companies also take into account the leasers payment capability and other risk factors when setting the price (Larsson & Hammarlund 2005:137-138) quoted in (Lamberg and Vailming, 2009).

Debt Factoring: When a firm sells its receivables to a finance company, this procedure is called factoring. Receivables can tie up a significant share of a company's working capital and a company can sell a flow of receivables and receive a credit up to 70-80%, including VAT, of the receivables value and in this way improve their liquidity. However, it is worth noting that the default risk of clients is not transferred. The finance company can also provide companies with an administrative service and when doing this they provide the company with an extensive service. They manage all the accounts receivables, accounts payables, collections and supply information for budget planning and so on (Abioro, 2013). The advantages for companies using these services are usually shorter credit times, better liquidity, savings in administration and fewer bad debts. The costs of these services are usually be the fees that the finance company charges. (Lamberg and Vailming, 2009). If liquidity decreases, the need for cash can be filled by taking more short-term loans but short-term loans can also be expensive and can be a sign of illiquidity and should have a negative impact on firms.

PERFORMANCE MEASUREMENT

Return Assets

ROA measures the profitability of operations relative to company's assets, displayed as a percentage (Penman, 2007:377). The formula for ROA = EBIT/ Total Assets

ROA is argued to be a good measure of management efficiency that is not affected by the financing structure and debt of the firm (Jose, et al., 1996:36). ROA measures the effectiveness with which management utilised the total funds entrusted to it (Roussow, et. Al 1996:235). The researcher shall examine the impact of cash management to the ROA for CAAZ.

General Business Cash Management

According to Pandey (2010), there is need for proper management of cash, since it is the most important current asset for the operation of business. The firm should keep sufficient cash, neither more or less. Cash shortage will disrupt the firms operations, while excessive cash will simply remain idle, without contributing anything towards the firm's profitability. He suggested the following as facets of cash management: Cash planning, Managing cash flows, Optimum cash levels and Investing surplus cash.

Cash Planning and Budgeting

- **Cash Budgeting and Forecasting**

A cash budget is a summary statement of the firm's expected cash inflow and outflow over a projected time period. It gives information on the timing and magnitude of expected cash flows and cash balances over the projected period. This information helps the financial manger to determine the future cash needs of the firm, plan for the financing of these needs and exercise control over the cash as well as liquidity of the firm (Hassen, 2014). The time horizon of cash budget differ from firm to firm, depending on factors such as seasonal variation which may require to prepare monthly cash budgets, daily or weekly cash budgets *(Pan Day 2005: 642).*

(Hassen, 2014) said that the short term forecast helps in determining the cash requirements for a predetermined period to run a business, if the cash requirements are not determined, it would not be possible for the management to know how much cash balance is to be kept in hand to what extent bank financing be depended up on and whether surplus funds would be available to invest in marketable securities to know the operating cash requirements, cash flow projection have to be made by a firm. *(Pan day, 2005).* According to Allman-Ward et al. (2003),"Ccash forecasting is used to estimate the liquidity position of the company for periods ranging from the current day up to one year.'' The purpose of a forecast can be determined by its length, a short term forecast of 0 – 3 months is used for liquidity management, while operational forecast of 1 – 12 months is used for medium term working capital and financing requirements, and long term forecast of 1 – 5 years is used for planning strategic financial goals (Hassen, 2014).

- **Long Term Cash Forecasting**

(Hassen, 2014), said that firm should carry out long term forecasts which give an idea of the company's financial requirements in the distant future. Once a company has developed long term cash forecast it can use it to evaluate the business case impact for example impact of new product developments or plant acquisitions on the firm's financial condition three five or more years in the future. Long term cash forecasts may be made for two, three or five year *(Pan day, 2005: 645)*

Cash Collection using Lock Boxes

To accelerate collections and reduce collection time; lock boxes, concentration banking and electronic fund transfer are techniques majorly used (Hassen, 2014). Allman-Ward et al. (2003) explained that the lock boxing techniques started after Second World War when banks identified a business opportunity in managing the collection of float for companies. This technique was developed to reduce the involvement of corporate clients in the handling of incoming cheques. It requires company to organize different receipts of cash centers where they have their customers through lock up boxes at different post offices nearer to the customers. This is a special post office boxes set up to intercept and speed up account receivable collection. IATA cash collection system controls all the cash for its airline members then disburse to all the customers whose cash has been collected on the passenger ticket (ACI, 2017).

According to Allman-Ward et al, (2003) lock boxing involves; receiving mails (cheques) in a bank-controlled post office box, picking up mails (cheques) at several times in a day, taking mails (cheques) back to the bank processing site, opening and sorting mails, determining if any cheques received should not be deposited based on instructions from the company. Such cheques may be with wrong payee, and post-dated cheques.

Abioro, (2013:183) said that bank or Cash Concentration is similar to lock boxes with the exception that different local banks are appointed as collection centres. It refers to the practice of moving cash from multiple banks into the firm's main account. Pandey (2010) described this as a system of operating through a number of collection centres instead of a single collection centre centralized at the firm's Head office. While Bragg (2010) quoted by Abioro (2013) explained that concentration is an excellent solution to solving the problem of inefficient management of treasury where with subsidiaries and branches maintain individual banks accounts resulting into serious tracking and reconciliation problem by the head office. He further explained that with cash concentration, cash in multiple accounts is pooled either through physically sweeping or notional pooling. Again Allman-Ward et al (2003) quoted by Abioro (2013) also stated that deposit reporting services, company-initiated concentration, standing instructions and maintaining zero balance accounts are options available to a company to move funds into the concentration.

Cash Collection using EFTs

Electronic fund Transfer - Electronic transfer is another method of effectively managing the collection of cash. It is a process whereby funds are transferred from one bank account to another bank account through computer terminals. Electronic transfer of cash takes few minutes and the cash becomes available to the company upon receipt of transfer notice (Brealey et al, 2004). According to Brealey, (2004) a wire transfer sends funds to the recipient's bank account more rapidly than any other form of payment and is the standard form of international payment.

Cash Disbursement

Objective in disbursement as a cash management strategy is to slow down disbursement as much as possible. By delaying payments, firm makes maximum use of trade creditors as a source of fund, as source which is interest free. This can be achieved through increasing disbursement float and maintaining controlled disbursement accounts. Van Horne (2001) defended the idea put forward by Ross (2000) that the objective of cash disbursement is to delay payment as long as it is legally and practically possible. He however warned that in pursuing this objective the firm should not compromise its relationship with supplier as they may withdraw credit.

According to Allman-Ward et al (2003), a disbursement system must be managed to reduce idle balances while providing timely disbursement information. They further explained that disbursements can be controlled with the operation of the following accounts;

- *Zero-balance accounts:* Where a master account funds the disbursement account which has experienced payments during the day. The aim is to return the disbursement account to zero at the close of each business day.
- *Controlled Disbursement Account:* A specialized form of zero balance account arranged with a bank where the account is funded at the beginning of each business day to cover the cheques presents for each day. This approach is to eliminate the need for companies to leave balances to cover clearing items.

Investing Idle Cash

Companies may have surplus or idle funds. Surplus fund are those that may not be required for immediate use. Pandey (2010) described surplus cash as excess amount of cash held by firm to meet its variable cash requirement and future contingencies and advised that such money should be temporarily invested in marketable securities. Once the firm has determined the optimal cash balance, the residual asset (surplus cash) should not be left idle. It should be properly invested to earn profit for the company. It can be invested in short term investments, marketable securities or government securities like treasury bills, commercial papers.

Berk et al. (2011) also advised that once a firm's need to hold cash is reduced, funds should be invested in short term investment securities. According to Marsh (2009), the objective of investment of short-term surplus cash is to ensure security, maintain liquidity and maximize interest or return. However, Allman-Ward and James (2003) noted that the cash manager has three objectives when investing funds in short term instruments, which are; retaining value, raising cash quickly and realizing income. They stated that cash surplus may arise from; variable sales pattern, sale of assets or investments, raising capital or debt. They further categorize the instruments for short term investing in three as follows;

 Government instruments: Treasury bills, bonds, revenue securities, general obligation
securities etc.

 Bank instruments: Time deposits, Certificates of Deposit (CD), Bankers Acceptance (BA),
repurchase agreements and sweeps.

 Corporate instruments: Commercial paper (CP), preferred stock and Money mutual funds

Cash collection techniques

Mauchi et.al (2011:1301) According to Gitman (2008), there are four cash collection techniques namely letters, telephone calls, personal visits and legal action. Letters are written communication of expressions, opinions and communication recorder for later reference (Palom, 2001). After a certain number of days, the firm sends a polite letter reminding the customer of the overdue accounts. If the account is not paid within a certain period after this letter has been sent a second more demanding letter is sent. A telephone call is a connection established over a telephone network between two parties (Chastain, 2008). If letters prove unsuccessful, a telephone call may be made to the customer to request immediate payment. If a customer has a reasonable excuse, arrangements may be made to extend the payment period. Personal Visits involves sending the credit controller to confront the customer and this can be very effective. Payment can be made on spot. Legal action is a judicial proceeding brought by one party against the other for a wrong doing (Davidson, 1992). Legal action is the more stringent step, an alternative to the use of a collection agency.

LIQUIDITY STRATEGIES AND BUSINESS PERFORMANCE

Lamberg and Salming, (2013) concluded that liquidity strategies do not have a significant impact on ROA. Only increased use of liquidity forecasting and short-term financing during financial crisis had a positive impact on ROA. Working capital ratio is the most commonly used liquidity measurement and in addition the use of working capital and DIO metrics has increased most during the crisis. More frequent monitoring and forecasting on liquidity levels and making more short-term investments can provide gains in profitability. Furthermore, companies are recommended to maintain their focus on liquidity and working capital management.

Cash Management and Business Performance

Garanina, (2012) researched cash management from a group of companies in the following industries: telecommunications, transport, electric power industry, trade, metallurgy, mechanical engineering, chemical and petrochemical, oil and gas. The research revealed that companies should seek to obtain a zero cash conversion cycle in order to increase their rate of return. The study also indicated a positive relation between companies' current liquidity ratio and RNOA. In the paper we also present the calculations of the recommended intervals of current ratio for the analysed economic sectors for the contemporary economic situation in Russia. Research results confirm that the use of incorrect working capital management models is likely to decrease the return ratio of an organization and therefore cause its insolvency (Zhang, 2011).

Cash Management in Banks

Ahmed, (2017) researched on the effect of cash management in the performance of commercial banks in Mogadishu, Somalia. This study also investigated the effects of capital adequacy, liquidity management, receivables management and payables management on cash management in the performance of these commercial banks. The study recommends the adoption of the cash management and financial performance of commercial banks. The cash management models were also recommended as a useful design for practicing commercial banks with respect to the implementation of best practice. The study results support the view that cash management drivers have a significant effect on financial performance of commercial banks in Somalia. The banks management is also urged to ensure that there are standardized and written manuals with the policies regarding trade credit and its management.

RESEARCH FINDINGS AND DISCUSSION

Cash Management Practices

Figure 5 below shows that CAAZ is using banking systems to manage its cash, partly offering discounts to its customers and its cash management system is not effective.

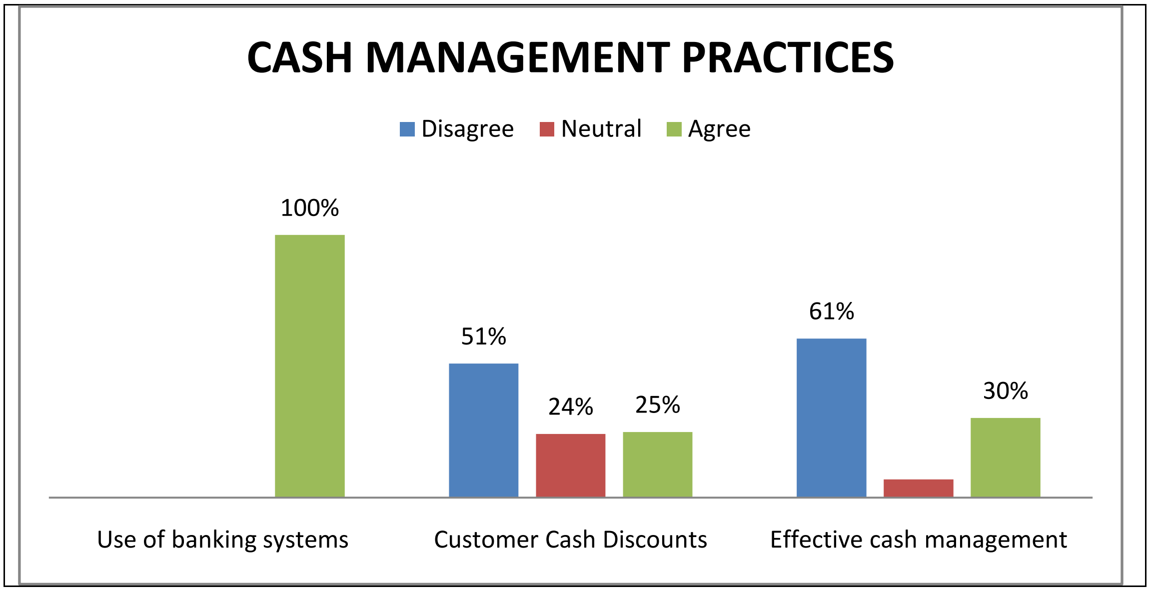

Figure 2 :Cash Management Practices Source: Survey of results

Use of Banking Systems: Figure 2 show that all of the respondents 100% agreed that CAAZ is using banking systems to manage its cash. The researcher observed that all cash is receipted using SAGE Pastel system, POS machines are used to swipe customer payments, and bank reconciliations are carried out. The researcher also observed that systems such as the Eco cash platforms are not available, and customers have no access to the accounts receivable database to view their outstanding balance.

Customer Cash Discounts: Figure 2 also show that, CAAZ partly offers discounts to its customers. Fifty percent 51% (17 out of 33) of the respondents disagreed that CAAZ offers discounts to its customers, while twenty four percent were neutral, and 25% (8 out of 33) of the respondents agreed that CAAZ offers discounts to customers.

Effectiveness of CAAZ cash Management systems

The results on Figure 2 shows that 61% (20 out 30) of the respondents disagreed with the notion that CAAZ's cash management system is effective. Seven percent (7%) were neutral, they did not disagree or agree with notion and thirty percent (30%) supported that CAAZ's cash management systems are effective. Cash management attempts, among other things, to decrease the length and impact of these float periods.

CASH COLLECTION AND CAAZ BUSINESS OPERATIONS

Figure 3 below shows results of the analysis respondents' responses on the general cash management strategies and their usage by CAAZ.

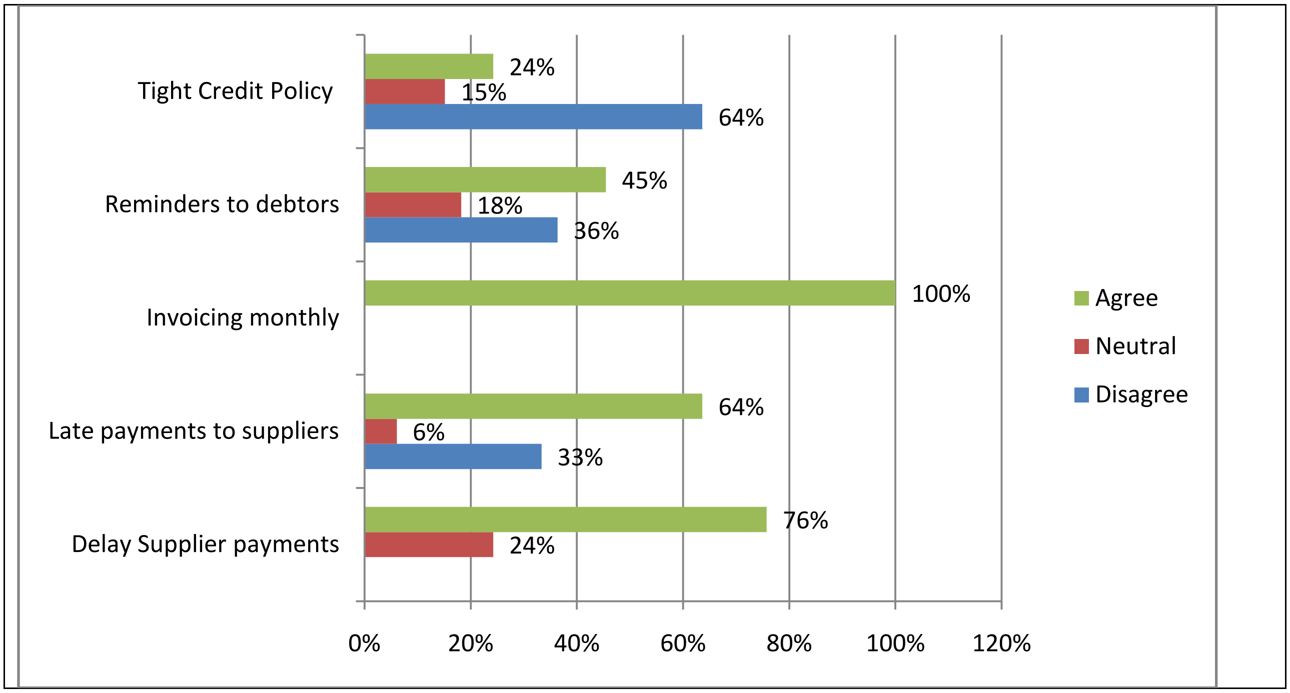

Figure 3 : Cash Collection and Suppliers Payments
Source: Survey of results

Tight Credit Policy: Figure 3 shows that, majority of the respondents felt that CAAZ has no tight credit policy. Sixty four percent (64%) (21 out of 33) of the respondents disagreed that CAAZ's credit policy is tight, twenty four percent (8 out 33) agreed that credit policy for CAAZ is indeed tight and 1% (5 out of 33) of the respondents were neutral.

Reminders to Customers: Figure 3 show that, forty five percent (45%) (15 out of 33) of the respondents agreed that CAAZ uses reminders to its customers to improve on its cash collections. Thirty six percent (36%) (12 out of 33) of the respondents were agreed that reminders are used by cash to its customers, while nineteen percent (19%) (6 out of 33) of the respondents were neutral.

Invoicing Strategy: Figure 3 show that, CAAZ invoices its customers on monthly basis, a process that support effective cash collection. All the respondents 100%) agreed that CAAZ invoices its customer on monthly basis. Abioro, (2013) said that other options should be explored as means for short-term financing which offer lower costs for the firm, in contrast to high variation in the use of short-term loans and -investments, least variation is observed with the use of frequent invoicing, suggesting that invoicing practices to customers have remained very stable, very few companies have started to invoice more frequently.

Delay and Late Payments of Suppliers: Figure 3 show that, suppliers for CAAZ are paid late and CAAZ is using the delay tactic to manage outflow payments to its suppliers. Sixty four percent 64% (21 out of 33) of the respondents agreed that CAAZ make payments late, after the credit period had lapsed. Thirty three percent (11 out of 33) disagreed, and 6% (2 out of 30) of the respondents were neutral, on whether CAAZ pay late its suppliers. Dolfe & Koritz (1999:48) states that a company's short-term debt is very much influenced by the cash outflow and the major part of this outflow is made up by accounts payables. Accounts payables have many similarities with receivables and are mostly affected by changing the routines which can offer great savings for the company, usually in the form of interest and a reduction of penalty interest.

The same figure 3 shows that CAAZ uses the delay tactic to manage the payment of its suppliers as a strategy to manage its cash. Seventy six percent (25 out of 33) agreed that CAAZ delay payment to its suppliers. Twenty four percent (8 out of 33) were neutral.

Optimum Cash Balances and Electronic Funds Transfers
Figure 4 below shows that CAAZ is partially using electronic system to manage its cash management system, it also shows that CAAZ poorly manage and determine its optimum cash balances as well poorly manage the use of cash for its capital purchases.

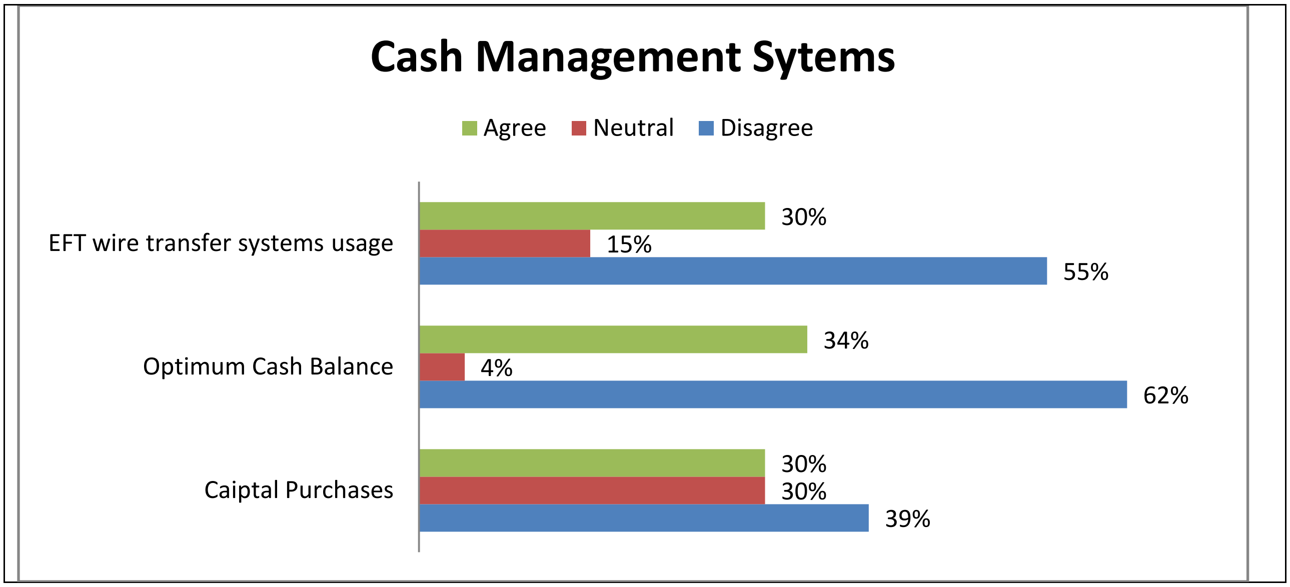

Figure 4: Optimum Cash Balance and ETF Management
Source: Survey of results

Electronic and Funds Transfer Wire Transfers (ETF)
Figure 4 shows that, Fifty five percent 55% (18 out of 33) of the respondents disagreed that CAAZ uses EFT effectively to manage its cash management, and 30% (10 out of 33) of the respondents disagreed that CAAZ offers discounts to customers, while 15% remained neutral, they did not agree or disagree. Electronic fund Transfer - Electronic transfer is another method of effectively managing the collection of cash. Electronic transfer of cash takes few minutes and the cash becomes available to the company upon receipt of transfer notice (Brealey et al, 2004).

Optimum Cash Balance Management: Figure 4 show that, CAAZ is not determining effectively its optimum and minimum cash balances. Sixty two percent 62% (21 out of 33) of the respondents disagreed that CAAZ determines its optimum and minimum cash balances. Thirty four percent (34%) (12 out33) agreed that CAAZ determines its optimum cash balances and 4% were neutral. The researcher observed that CAAZ rely only on the budget and the bank balances to determine its cash levels. According to Pandey (2010) quoted by Abioro (2013) one of the primary responsibilities of a financial manager is to maintain a sound liquidity of the firm so that dues may be settled in time. He should be able to determine the appropriate amount of cash balance to be held by the company. Such a decision is influenced trade–off between risk and returns. Ndiragu (2014) opined that cash management involves a trade-off between the need for liquidity and desire for profitability.

Capital Expenditure Management: Figure 4 shows forty percent 40% (12 out of 30) of the respondents agreed that CAAZ offers cash back to its customers, while forty seven percent were disagreed, and thirteen percent (13%) (4 out of 30) of the respondents were neutral.

Cash Management and Sources of Cash
Figure 5 below shows that cash management practices, which can be used by an organization.

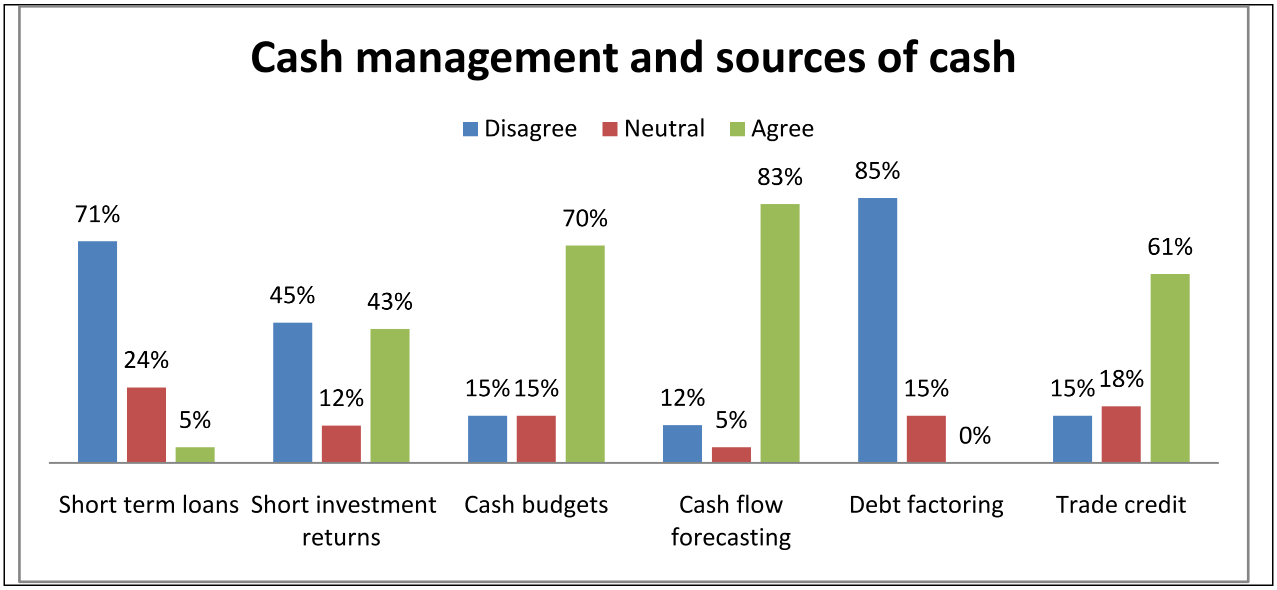

Figure 5: Cash Management and Sources of Cash
Source: Survey of results

Short Term Loans: Results on figure 5 show that CAAZ does not use short term loans. Seventy one percent (71%) (8 out of 30) of the respondents disagreed that CAAZ uses short term loans to boost its cash, only 5% agreed that CAAZ uses short term loans while 24% were neutral. The researcher observed during the interviews that CAAZ uses short term loans like overdraft to finance salaries when they are due. Short-term loans are one of the most common ways for treasurers to finance a firms working capital needs, this type of loan is generally unsecured debt. Short-term loans are one of the most common ways for treasurers to finance a firms working capital needs. Usually it is used to finance build-ups of inventory and receivables. This type of loan is generally unsecured debt and has a maturity of 90 days (Abioro, 2013).

Cash Budgeting and Forecasting: Figure 5 show seventy percent (23 out of 33) of the respondents agreed, 15% (5 out of 33) disagreed and 15% (5 out of 33) were neutral that CAAZ uses cash budgets and cash forecasts as technique to manage its cash resources. According to Allman-Ward et al. (2003), Cash forecasting and budget are used to estimate the liquidity position of the company for periods ranging from the current day up to one year.'' Hassen, (2014) said that the short term forecast helps in determining the cash requirements for a predetermined period to run a business, if the cash requirements are not determined,

Debt Factoring: Figure 5 show eighty five percent 85% (28 out of 33) of the respondents disagreed and 15% were neutral that CAAZ uses debt factoring as a tool to manage its cash. Receivables can tie up a significant share of a company's working capital and a company can sell a flow of receivables and receive a credit up to 70-80%, including VAT, of the receivables value and in this way improve their liquidity. The finance company can also provide companies with an administrative service and when doing this they provide the company with an extensive service. They manage all the accounts receivables, accounts payables, collections and supply information for budget planning and so on (Abioro, 2013). The advantages for companies using these services are usually shorter credit times, better liquidity, savings in administration and fewer bad debts. The researcher observed that bad debt is huge in CAAZ all the past six years used in this research.

Trade Credit: Figure 5 show sixty one percent 61% (20 out of 33) of the respondents agreed and 18% were neutral while 15% disagreed that CAAZ uses trade credit as a tool for its cash management.
Companies in need of additional working capital can use a trade credit that can serve as a liquidity reserve (Abioro, 2013).

INVESTMENT OF IDLE CASH
Figure 6 below shows that CAAZ is not investing idle cash into either marketable securities or governments securities.

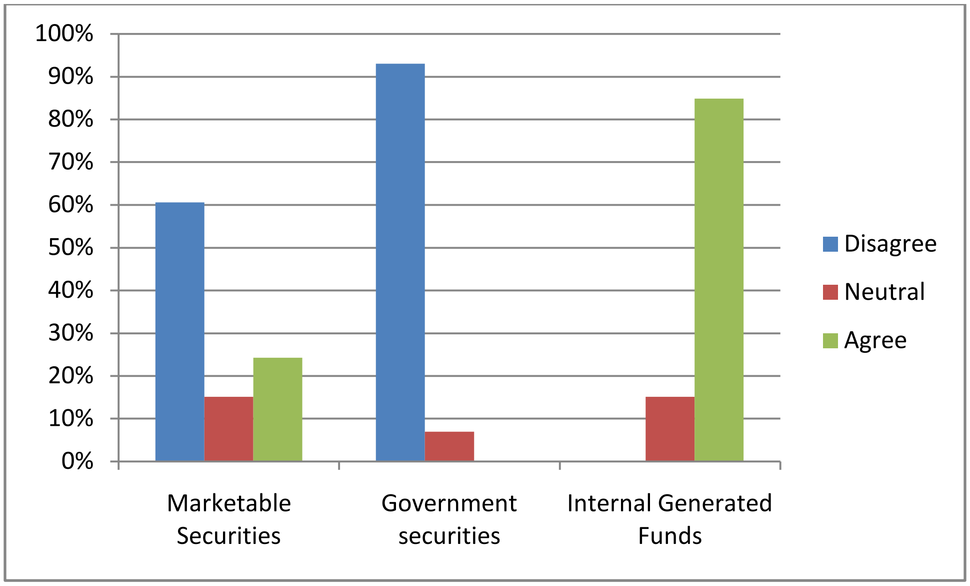

Figure 6: Investment of cash
Source: Survey of results

Figure 6 show sixty one percent (20 out of 33) of the respondents disagreed, 24% (8 out of 33) disagreed and 15% (5 out of 33) were neutral that CAAZ uses invest idle cash into marketable securities. Ninety three percent (31 out of 33) of the respondents disagreed, and only 7% (2 out of 33) were neutral that CAAZ invest idle cash into government securities.

INTERVIEW ANALYSIS

The first interview question meant to establish the information system processes that are available on CAAZ's cash management. The interviewed team from CAAZ emphasized that the CAAZ used SAGE Pastel as a tool to manage its cash systems. Budgets, receipts and all the general ledger accounts are maintained through this system. The company operates transparently in terms of information availability and safe keeping. There are policies and procedures but some the procedures do not indicate how frequent they are going to be reviewed. Some of the key accounting policies have not been approved though they are used. The interviewed team also expressed some corner on non-availability of payment platforms such as Eco-Cash systems. CAAZ customers are airline operators that all over the world, it was also highlighted that there is need to implement an internet based system that enable customer interaction and communication to their ledger accounts rather than waiting to send them through email or through posting.

- **Explain the cash management strategies used by CAAZ?**

The research participants explained that there are a lot of strategies that are being pursued that include revenue collection strategies.CAAZ invoices the customers on monthly basis and they are sent to the customer on or before 15th of the following month. The customers are expected to make the payment by the 30th of the following month from the date of the invoice. It was also pointed that CAAZ was affected when its finances were being sanctioned and confiscated as a government company and had to close the some bank accounts and pull out of IATA which collect all the aviation funds on airline behalf and promptly disburse them every month end. CAAZ is now relying on one on one customer management as a result its debtors list is huge because it is using a costly revenue collection model. The researcher also found out that CAAZ can now renew its IATA membership to easy business and payment collections from its airlines. This strategy of using IATA as a collection agent is supported by Abioro, (2013:183)who said that a company can use bank / cash concentration which is similar to lock boxes with the exception that different local banks are appointed as collection centres. It refers to the practice of moving cash from multiple banks into the firm's main account. Pandey (2010) described this as a system of operating through a number of collection centres instead of a single collection centre centralized at the firm's Head office.

Banking system utilization: All cash is banked and there is a policy that all cash collected must be banked and this policy is seriously adhered to. The Accountant also controls the cash by ensuring bank reconciliations are timeously done. The bank accounts and POS machine transaction are linked to Accountants responsible for managing revenue collection, and this is done promptly through email communication.

- **Explain how cash management has influenced CAAZ performance?**

This question sought to assess the how cash management has impacted on CAAZ business performance. There were mixed feeling from the interviews. They indicated that the way cash is being managed in CAAZ is affecting the operations. The company has a lot of equipment that yet to be replaced and there is no cash. Government has stopped financing parastatals and they are expected to raise their own capital funds. CAAZ had set Aviation Infrastructural Development Fund (AIDEF) which is charged to all passengers that pass through the airports but this is insufficient to finance all the capital expenditures required for the company. It was also pointed out that in terms of the Civil Aviation Act CAAZ has the mandate to ensure smooth movement of passengers and airlines into and out of Zimbabwe, but when the cash requirements exceed the available cash then the company will face some facilitation challenges.

There were also some sentiments from failure to collect cash from the quasi-government organizations and the government department operating at airports especially on the utility services such as water and electricity. The overall comment from the interviewers was that cash management in CAAZ is fairly managed and is supporting the performance of the organization positively.

CASH MANAGEMENT AND BUSINESS PERFORMANCE

Cash Flow and Profitability

Table 1: Cash Balance and Profitability 2011-2017

Year	Cash Balance	Profitability/(Loss)
2011	2,453,646.00	(39,561,018.00)
2012	7,295,228.00	(12,553,606.00)
2013	12,717,194.00	(10,747,527.00)
2014	15,150,030.00	(18,160,393.00)
2015	26,017,999.00	(9,124,293.00)
2016	9,975,935.00	(2,201,866.00)
2017	19,187,125.00	(6,935,373.00)

Source: CAAZ Audited Annual Financial Statements 2012-2017

The correlation between Cash balance (liquidity) and Return on Assets is 0.57, and R^2 squared is 0.32 (32%). The coefficient of correlation (R= 0.57) shows that there is positive relation between cash balance and Return on Assets. Since R^2 is 32% this implies that up 32% of variation in profitability of CAAZ is influenced by changes in cash balance levels. R-squared is always between 0 and 100%: and when R^2 is equal zero it means the model does not explain any of the variation in the response variable around its mean. R^2 is called coefficient of determination (Mugo, 2013). The mean of the dependent variable predicts the dependent variable as well as the regression model. When R^2 is equal to 100% this represents a model that explains all of the variation in the response variable around its mean. Mauchi, et.al (2011:1304) examined the impact of cash management on the overall company performance at Hunyani Flexible Products, determining the efficiency of the cash management policy, used cross sectional review of the company end of year cash flow statement and end of year accounts to assess the relationship between profitability and cash flow. It was concluded that shows that as the level of cash flow increase from 10-40 also profitability increases by the same amount.

Cash Balance and Total Assets

Table 2: Cash Balance and Total Assets 2011-2017

Year	Cash Balance ($)	Total Assets ($)
2011	2,453,646.00	171,775,692.00
2012	7,295,228.00	194,321,379.00
2013	12,717,194.00	260,724,313.00
2014	15,150,030.00	453,822,720.00

2015	26,017,999.00	481,282,918.00
2016	9,975,935.00	481,875,735.00
2017	19,187,125.00	482,633,466.00

Source: CAAZ Audited Annual Financial Statements 2012-2017

The correlation between Cash balance (liquidity) and Return on Assets is 0.76. and R^2 squared is 0.57 (57%). The coefficient of correlation (R= 0.76) shows that there is positive relation between cash balance and Return on Assets. Since R^2 is 57% this implies that up 57% of variation in Total Assets of CAAZ is influenced by changes in cash balance.

Liquidity and Return on Assets

Table 3.Liquidity and Return on Assets 2011-2017

	Current Ratio	ROA
2012	0.0937	-0.0646
2013	0.1230	-0.0412
2014	0.0960	-0.0400
2015	0.1625	-0.0190
2016	0.0979	-0.0046
2017	0.1550	-0.0144

Source: CAAZ Audited Annual Financial Statements 2012-2017

The researchers examined and analyzed the impact of cash using the liquidity ratio to return on assets. The liquidity ratio (Current Ratio) results ranged from 1:0.09 to 1:0.16 which is far too below the recommended 1:2 ratio (Roussow, et.al. 1996). The correlation between liquidity and Return on Assets is 0.46, and coefficient of determination, R^2 is 0.21 (21%). The coefficient of correlation (R= 0.46) shows that there is weak relationship between liquidity and Return on Assets. Since R^2 is 21% this implies that up 21% of variation in Return on Assets for CAAZ is influenced by changes in liquidity levels of the firm.

One of the most common and also the oldest measure of corporate liquidity is current ratio. It was developed at the end of the 19th century in order to evaluate the credit-worthiness of the companies. In its simplicity it expresses the liquid resources available when current liabilities are met and is calculated as follows Maness & Zietlow (2005:27) has expressed that historically a current ratio of 2.0 has been a norm, meaning that company has approximately twice as much current assets as coverage for short term creditors.

Cash Conversion Cycle

Table 4: Cash Conversion Cycle per Year

YEAR	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
	Days	Days	Days	Days	Days	Days
Receivable (Debtors) Turnover (A)	353	332	368	407	374	403
Inventory Days (B)	5	9	7	11	7	7
Operating Cycle (A+B)	**358**	**341**	**375**	**418**	**382**	**409**
Creditors Payments Days (C)	192	225	165	238	129	210
Cash Conversion Cycle (Days) (A+B-C)	**166**	**116**	**210**	**179**	**253**	**199**

Source: Analysis of Audited Annual Financial Statements 2012-2017

The cash conversion cycle for CAAZ measured in days for the period 2012 to 2017 was 166 days in year 2012, 116 days in year 2013, 210 days in year 2014, 179 days in year 2015, 253 days in year 2016 and 199 days in year 2017. CAAZ is taking an average of not less than three month to covert its operational activities into cash. The study by Ebben and Johnson (2011) investigated the relationship between cash conversion cycle and levels of liquidity, invested capital, and performance over time, concluded that cash conversion cycle is found to be significantly related to levels of liquidity, invested capital, and performance.

CONCLUSION AND RECOMMENDATIONS

Conclusions

- The study focused on cash management strategies and the business performance for CAAZ. Data was analyzed by applying descriptive statistics for the time period of year 2011 to 2017. Cash is considered to be the most significant asset of the business. The cash management strategies were explored and it has been concluded that CAAZ should improve on its cash management strategies so that its business performance improves too.
- It can be concluded that the research was a success as it was able to answer all the research questions and covered all the research objectives. The research evaluated the impact of cash management techniques on business performance for parastatals using CAAZ as the case study. The recommendations below were based on the findings obtained from the research.

Recommendations

- The organization should tighten its credit policy implementation and ensure cash collection improves to shorten the cash conversion cycle. CAAZ should adopt cash management strategies that enable it to improve on receivable collections because the level of cash conversion cycle is too high and may not be sustainable in the long run.
- CAAZ should implement cash management strategies (for example shortening the invoicing period, debt factoring, optimum cash balance identification, and short term investments) so that it improves the business performance which continuously reporting losses since year 2011 to year, 2018.
- CAAZ should invest into electronic e-commerce business platforms that allow its customers to access their ledger accounts from wherever they are, as long as they have internet access rather than relying on manual delivery of invoices, sending of invoices and statements via email only.
- CAAZ should implement systems that determine the optimum cash balances and plans to invest the excess cash.
- The study further recommends for future research, that there is need to make an in depth analysis impact cash management strategies using cash management models and business performance for companies involved in serving airport business. These companies include the handling companies and the airport authorities.

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