# EFFECTS OF CASH MANAGEMENT TECHNIQUES ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN

# **MOGADISHU SOMALIA**

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**ABSTRACT:** The general objective of this study was to investigate the effects of cash management techniques on the financial performance of commercial banks in Mogadishu Somalia. The study population was selected a number of banks such as Dahabshil bank, premier bank and Salaam Somali bank of 100 representatives of commercial banks in Mogadishu. The sample size was 80 staff and management of the population. The study employed a survey research design in data collection. After data processing, statistical techniques of data analysis like (SPSS) version 20 software were used to determine the relationship between cash management techniques and financial performance in commercial banks. The results generally indicate that except for cash disbursement, other independent variables cash planning, cash budgeting and cash collection period were found to have significant and positive correlations on financial performance of commercial banks. There was a weak positive but insignificant correlation between cash disbursement and financial performance of commercial banks. The study recommends that managers of commercial banks in Mogadishu Somalia should employ knowledgeable and qualified personnel that ensure the right decisions of cash management system.

**Keywords:** Cash Management, Techniques, Cash planning, Cash budgeting, Cash Collection Period, Cash disbursement and Financial Performance.

## INTRODUCTION

#### **Background of the study**

It is worth noting that any enterprise having a profit objective or not needs money to acquire resources to operate. The resources are limited by ownership and supply and therefore command a price. Money for investment is also a resource and is only available because it has been withheld from consumption, thus need for its proper management (Mwongo, 2010). This brings us to the concept of cash management techniques that has since emerged as a key concept preoccupying the international community. It comprises the actual measures undertaken by a company in order to achieve the goals of cash management, i.e. in order to "maximize liquidity and control cash flows, and maximize the value of funds while minimizing the costs of funds" (Caviezel,2007).

Cash is commonly referred to as the life-blood of a business. According to Attom and Mbroh (2012), cash refers to currency (coins and paper) that is generally accepted as a medium of exchange for goods and services. It also includes money in hand, bank accounts balances, petty cash, cheque and short-term highly liquid investments held by the firm.

The adoption of sound cash management techniques will assist an entity in improving its performance. This can be attributed to increase in sales volume normally through speeding collection on sales made on credit thus eliminating possibility of bad debt, increase in employee's turnover due to availability of finances to meet their wage requirements from increased cash inflow generated from short term investments, controlling payments normally geared towards ensuring that limited amount of cash exit the business, cash shortage financing from credit institutions among others, and finally increase in asset levels due to readily available cash for acquisition generated from short term investment, credit sales collections thus all impacting positively on production output of an enterprise. Small and medium level enterprises have become important contributor to the Kenyan economy. Cash management the main ambition of most organizations is today to present good financial results. An organization's financial result is, for example, strongly influenced of the efficiency in an organization's value chain. Accordingly to Larsson (2000) the efficiency in the value chain can be improved, if the organization's control and perhaps adjust their financial routines. One part of organization financial routines with great potential, which often is neglected are organizations managing their liquid capital or cash management (ibid).

Cash management is, according to Larsson (2000), not a new phenomenon and organizations have always considered how their liquid capital in the best way should be managed. Even though managing liquid capital always has been done, the term of cash management has brought new light to managing liquid capital with focus on the time demission of cash flow (ibid).

Cash Management originally means the management of liquidity in order to meet their day to day commitment (Collins & Jarvis, 2000).

In Africa, It has been 15 years since the original Cash Management Handbook was written, and much has changed since then. Cash management is now a household term with frequent articles in the media about its growth, innovation, and changes of technology that can be used cash management such as email money transfer (EMT). According to (Pandey 2004).

In Somalia, In Somalia, many businesses in Mogadishu city there is some problems of cash management including lack of business knowledge, luck of effective functioning of central bank, Shortage of currency Somali Shillings, high inflation, printing illegal currency and short-term highly liquid investments held by the firm.

#### **Statement of the Problem**

The adoption of sound cash management techniques will assist an entity in improving its performance. This can be attributed to increase in sales volume normally through speeding collection on sales made on credit thus eliminating possibility of bad debt, increase in employee's turnover due to availability of finances to meet their wage requirements from increased cash inflow generated from short term investments. (Ondiek, 2013)

Cash management techniques are adopted by organizations in order to ensure effective investment of cash and to achieve financial performance both in the short run and long run (Dodds 2009) but despite the adoption of these cash management techniques, still most present organizations run bankrupt to the extent that some are even closed due to poor cash management. Cash is the lifeblood of all growing Organizations and is the primary indicator of organizational health. The effect of cash flow is real, immediate and, if mismanaged, totally unforgiving. Cash needs to be monitored, protected, controlled and put to work (Marie, 2001).

The financial industry in Somalia has experienced a tremendous changes in the past decades in which many commercial banks have been incorporated. However, these commercial banks face numerous challenges and the most critical one is the lack of an effectively functioning central bank that able to regulate the banking industry and control the demand and supply of money in the financial sector. Moreover, such challenge has affect on the cash availability and management in the commercial banks, insecurity, low relationships to bank transfers, low automatic teller machine, low check payments and other financial instrument, delayed payment of workers which perhaps is caused by poor management of cash. Therefore, the current state of commercial banks have not use effective cash management system such as cash planning, cash budgeting, cash collection period and cash disbursement.

The gap identified financial performance that commercial banks employees are not performing the basic cash management techniques in their businesses. These techniques are omitted in business largely due a lack of knowledge and skills to perform the task. Therefore, the purpose of the study is to investigate which cash management techniques are being performed by commercial banks. This study is the first of its kind aimed at exploring the effects of cash management techniques employed by the commercial banks.

#### **Objective** (s) of the Study

This study was based on the following general and specific objectives:

## General Objective (s)

To determine the effects of cash management techniques on the financial performance of commercial banks in Mogadishu Somalia

## **Specific Objective** (s)

- To evaluate the effects of cash planning on the financial performance of commercial banks in Mogadishu Somalia.
- To analyze the effect of cash budgeting on the financial performance of commercial banks in Mogadishu Somalia.
- 3. To identify the effect of cash collection period on the financial performance of commercial banks in Mogadishu Somalia.
- 4. To verify the effect of cash disbursement on the financial performance of commercial banks in Mogadishu Somalia.

# **Conceptual Framework**

Mugenda (2008) defines conceptual framework as a concise description of the phenomenon under study accompanied by a graphical or visual depiction of the major variables of the study. According to Young (2009), conceptual framework is a diagrammatical representation that shows the relationship between dependent variable and independent variables. A conceptual framework shows the relationship between independent and dependent variables.





# **Cash Planning**

According to Pandey (2003) cash planning is a technique used to plan and control the use of cash. It involves preparation of forecasts of cash receipts and payments so as to give out an idea of the future financial requirements. Therefore the management of the school needs to determine the schedules of monthly disbursements and collection schedules of creditors. with efficient cash planning system, the financial needs of the school will be met, with reduced possibility of the cash balances which lowers the school's financial performance and cash deficits which can lead to school's failure . He further notes that a cash budget is the most significant device used to plan for and control cash receipts and payments. A cash budget is a summary statement of the firm projected time period. This information helps the financial manager to determine the future cash needs of the firm, plan for the financing of these needs and exercise control over cash and liquidity of the organization (Kakuru2003). The researcher is wondering whether bank of African for inflows and outflows of cash.

#### **Cash Budgeting**

Preparations and Implementations of cash budget: - Gitman (2008) states that, a cash budget is a statement of the firm have planned inflows and outflows of cash. It is used by the firm to estimate its short term requirement with particular attention being paid to planning for surplus cash or for cash shortages. Kirkman (2006) arrived at the same idea by highlighting that as a component of implementing an effective cash management program, a cash flow statement called a cash budget may be prepared.

Chastain (2008) asserts that budgets are the financial road map companies' use, when planning business expenses and tracking the cash flow throughout the business year. Vanhorne (2001)

says that, a common cash management tool found in companies is a cash budget. Most companies prepare budgets on the departmental level and roll these individual budgets into one master budget. Creating several smaller budgets, can help managers determine which operations use more cash and struggle to stay on the projected budget amounts. This discovery gives managers an idea of when improvements needed to correct the company's cash flow problems. Therefore, cash budgeting is another aid to an effective cash management.

#### **Cash Collection Period**

According to Ross (2000), cash collection is a function of accounts receivable, it is the recovery of cash from a business or individual with which the company is issued an invoice. Gitman (2008) and Vanhorne (2001), offer theoretical positions drawn from their observations and consulting experience on the fact that a firm can improve its cash management efficiency by collecting accounts receivable as soon as possible. The most obvious way of bringing forward cash inflows, would be to press debtors for earlier payment although this policy will result in goodwill and problems with customers (Palom, 2001).

There was very little scope for speeding up payments when the credit period currently allowed to debtors is no more than the norm for the industry. Myers (2004) defend the idea put forward by Palom (2001) and indicating that it might be possible to encourage debtors to pay more quickly by offering discounts for earlier payment. In order to improve cash management efficiency and enable more availability of cash the company can use this as an alternative solution. The objective of managing accounts receivable is to collect accounts receivable as quickly as possible without losing sales from high pressure collection techniques (Gitman, 2008).

#### **Cash Disbursement**

According to Gitman (2008), cash disbursement is a function of accounts payable; it includes all outlays of cash by the firm during a given financial period. The objective of cash disbursement is to control payments and minimize the firm's cost associated with making payment. Vanhorne (2001), defends the idea put forward by Ross (2000), which says that the objective of cash disbursement is to delay payment as long as it is legally and practically possible. In pursuing this objective the firm should not compromise its relationships with suppliers as this may withdraw trade credit.

According to McLaney (2006), negotiating a reduction in cash outflows may be done in order to postpone or reduce payments. This will be done by taking longer credit from suppliers. However, if the credit period allowed is already generous, creditors might be very reluctant to extent credit even further and any such extension of credit would have to be negotiated carefully. There would be a serious risk of having further supplies refused. The rationale for such a move is to have complete control of the cash and to provide greater investment opportunities with larger sums of money available as surplus, (Bort, 2004). Given the context of a company, cash disbursements are controlled through a policy of delaying payments to suppliers. However, failure to meet financial obligations by the company on time, owing to cash shortages mean loss of further supplies from injured suppliers. This is extremely damaging since some products would be vital to continuing business operations.

#### Financial performance of commercial banks

Financial performance is a subjective measure of how well an organization can use assets from its primary mode of business and generate revenues (Greenwood and Jovanovic, 1990). This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. There are many different ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales (Jayawardhera and Foley, 2000).

Profit is the ultimate goal of firm. To measure the profitability, there are variety of ratios used of which Return on Asset, Return on Equity and Net Interest Margin are the major ones (Murthy and Sree, 2003). ROA is a major ratio that indicates the profitability of a bank. It is a ratio of Income to its total asset (Khrawish, 2011). It measures the ability of 5 an organization's management to generate income by utilizing company assets at their disposal. Net Interest Margin (NIM) is a measure of the difference between the interest income generated by banks and the amount of interest paid out to their lenders, relative to the amount of their assets. It is usually expressed as a percentage of what the financial institution earns on loans in a specific time period and other assets minus the interest paid on borrowed funds divided by the average amount of the assets on which it earned income in that time period (the average earning assets). ROE is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment.

#### **Empirical Literature Review**

A study by Kwame (2007) established that the setting up of a cash balance policy ensures prudent cash budgeting and investment of surplus cash. This finding agreed with the finding by Kotut (2003) who established that cash budgeting is useful in planning for shortage and surplus of cash and has an effect on the financial performance of the firms. The assertion by Ross et al.(2011)

that reducing the time cash is tied up in the operating cycle improves a business profitability and market value furthers the significance of efficient cash management practices in improving business performance. Dong and Tay Su (2010) also attempted to investigate the relationship existing between profitability, the cash conversion cycle and its components for listed firms in Vietnam stock market. Using a descriptive cross sectional design, their findings showed a strong negative relationship between profitability, measured through gross operating profit, and the cash conversion cycle and all of its components. This means that as the cash conversion cycle increases, it will lead to declining of profitability of a firm. Therefore, the managers can create a positive value for the shareholders by handling the adequate cash conversion cycle and keeping each different component to an optimum level. Ali, et al (2013), studies the association between various earnings and cash management measures of firm performance and stock returns in Iran. They used the simple and multiple regressions to analyse the data for a period of nine consecutive years from 2003 to 2011. The study revealed that company's performance and cash flow have a s earning based measures are more related to stock returns and depict the company performance better than cash flow measures in some companies with higher accruals.

Thanh and Nguyen (2013), carried out a study on the effect of Banking Relationship on financial performance in Vietnam. They used the multiple regression to analyses the data, using a sample of 465 companies listed in Vietnam observed in period 2007 to 2010. The study revealed that firm performance decreases as the number of bank relationships increases. Additionally, the study also indicates that cash management has negative relationship with firms, return on equity, while assets have negative association with return on assets.

Chikashi (2013), carried out an investigation of comprehensive income and firm performance. The case of the electric appliances industry of the Tokyo Stock Exchange. The researcher uses the data for the fiscal year of 2009 to 2011 and employs the pooled regressions (Panel data regression analyses). The study revealed that cash management and financial performance have a significant negative relationship. In addition, comprehensive incomes published by the firms were superior to other earnings or cash flow variables in predicting their future stock returns.

Zhou, et al (2012), examined the relationship between free cash management and financial performance evidence from the listed Real Estate Companies in China. They used principal component analysis and regression analysis on the data from 2006 –2011 of all listed real estate companies in China. The study revealed that the free cash management of a company is negatively liner –correlated to its financial performance too much free cash management will lead the financial performance to decline.

#### **Research Gaps**

Although some studies have been done in this area, there is none that has addressed cash management techniques in commercial banks. The only documented research in this field are (MOHAMED, September,2016) which looked cash management on financial performance of private secondary schools in Mogadishu Somalia. It is for this reason that the researcher receives backing to undertake the research.

#### Methodology

This study adopted a cross-sectional survey research design aimed at collecting large number of qualitative and quantitative data. A cross-sectional survey research design enables collection of data about given phenomena within a limited time horizon which can help describe incidences of events or provide an explanation of factors related to an organization (Saunders, Lewis, and Thornhill, 2009). A cross-sectional survey research design was useful in overcoming time and

budget constraints (Cooper and Schindler, 2013). Survey design has the advantages of being cost effective per respondent as compared to other methods; it employs an easier method of data collection; it will enables the researcher to have a much larger sample size that could even range into thousands hence enhancing the accuracy of the conclusions arrived at. Finally, due to anonymity, respondents become more candid hence improving the accuracy of the data will obtain.

Sample selection was used of probability sampling technique especially simple random sampling and purposive sampling. Simple random sampling was used because the study intended to select a representative without bias from the accessible population (Oso and Onen, 2005).

The researcher used Sloven's formula to calculate the sample size with maximum acceptable error **5%**.

$$n = \frac{N}{1+N a^2}$$
$$n = \frac{100}{1+100(0.05)^2} \quad n = 80$$

#### **Data Analysis and Presentation**

The researchers' obtain detailed information about the phenomena being studied, and then tried to establish patterns, trends and relationships from the information gathered. Qualitative aims at providing basic information without proof of it. Before processing the responses, data preparation was done on the completed questionnaire by editing, coding, entering and cleaning the data. Data collect was analyzed using descriptive statistics. The descriptive statistical tools helped in describing the data and determining the respondents' degree of agreement with the various statements under each factor. After data processing, statistical techniques of data analysis like (SPSS) version 20 software were used.

The multiple regression analysis was used to explore the relationship between cash planning, cash budgeting, cash collection period and cash disbursement as the independent variable and financial performance of commercial banks as the dependent variable. Pearson's product moment correlation analysis was also used and it's a powerful technique for exploring the relationship among variables. Correlation coefficient was used to analyze the strength of the relations between variables. Correlation coefficients were calculated to observe the strength of the association. A series of multiple regression analysis (standard and step wise) was used because they provide estimates of net effects and explanatory power. Analysis of variance (ANOVA) was used to test the significance of the model. R2 was used in this research to measure the extent of goodness of fit of the regression model.

Response	Total	Percentage	
None Responses	30	37.5	
Response	50	62.5	
Total	80	100	

From the data collected, out of the 80 questionnaires administered, 50 were filled and returned, which represent 62.5% response rate. This response rate is considered satisfactory to make conclusions for the study. Mugenda and Mugenda (2003) observed that a 50% response rate is adequate, 60% is good, while 70% rated very good. This implies that based on this assertion, the response rate in this case of 62.5% is therefore good. The recorded high response rate can be

attributed to the data collection procedures for instance, the researcher pre-notified the potential participants for the survey, the researcher administered the questionnaire with the help of research assistants through drop and pick method and follow up calls were also made to clarify queries as well as to prompt the respondents to fill the questionnaire. These methods facilitated the whole process of data collection hence the high response rate.

Variables	Cronbach's Alpha	Comments
Cash planning	0.727	Accepted
Cash budgeting	0.721	Accepted
Cash collection period	0.718	Accepted
Cash disbursement	0.715	Accepted
Financial performance	0.712	Accepted
of commercial banks		

## Table .4.2: Reliability of Statics

Prior to exploring and describing the relationship between cash management, cash planning, cash budgeting, cash collection period, cash disbursement and financial performance of commercial banks in Mogadishu Somalia, the measures were examined and assessed to gauge reliability and validity.

Cronbach's alpha was used to determine the internal reliability of the questionnaire used in this study. Values range between 0 and 1.0; while 1.0 indicates perfect reliability, the value 0.70 is deemed to be the lower level of acceptability (Hair, Black, Barry,

Anderson, & Tatham, 2006). The reliability statistic for each of the identified factors is presented in Table 4.1. It is evident from Table 4.1 that Cronbach's alpha for each of the identified factors is well above the lower limit of acceptability of 0.70. The findings indicated that strategic cash planning had a coefficient of 0.727, cash budgeting had a coefficient of 0.721, cash collection period had a coefficient of 0.718, cash disbursement had a coefficient of 0.715, and financial performance of commercial banks obtained a coefficient of 0.712. The results indicate that the questionnaire used in this study had a high level of reliability. These tables indicate that each of the items relates to the identified factor and that the coefficient alpha value of the identified factor will not increase if some of the items are left out. Basically, reliability coefficients of 0.7 or more are considered adequate for social studies (Hair, Black, Barry, Anderson, & Tatham, 2006; Malhotra, 2002).

#### Regression Analysis

Multiple regression analysis was performed to assess the effects between the dependent variable (Financial Performance) and the independent variables (Cash management) and to test the research hypotheses on the cash budget management determinants on financial performance multiple regression analysis was conducted in order to establish the best combination of independent (predictor) variables would be to predict the dependent (predicted) variable and to establish the best model of the study (Cooper & Schindler, 2013).

#### Table 4.13 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.88	.788	.769	.20316
	8 <sup>a</sup>			

From the ANOVA table 4.11, it is clear that the overall standard multiple regression model (the model involving constant, cash planning, cash budgeting, cash collection period and cash disbursement) is significant in predicting how cash planning, cash budgeting, cash collection

period and cash disbursement determine financial performance of commercial banks in Mogadishu Somalia. The regression model achieves a high degree of fit as reflected by an R2 of 0.465 (F = 19.1;

P = 0.001 < 0.05).

## **Table 4.14 Analysis of Variance**

AN	O	V	A	b
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Model 1	Sum of Squares	Df	Mean Square	F	Sig.
Regression	6.904	4	1.726	41.817	.000 <sup>a</sup>
Residual	1.857	45	.041		
Total	8.761	49		1 3.2	
				7 5 3	

Analysis of Variance (ANOVA), as the name implies, is a statistical technique that is intended to analyze variability in data in order to infer the inequality among population means. This may sound illogical, but there is more to this idea than just what the name implies. The ANOVA technique extends what an independent-samples t test can do to multiple means. The null hypothesis examined by the independent samples t test is that two population means are equal. If more than two means are compared, repeated use of the independent-samples t test was lead to a higher Type I error rate (the experiment-wise  $\alpha$  level) than the  $\alpha$  level set for each t test.

Model 1	Unstandardized Coefficients		Standardize	Т	Sig.
			Coefficients		
	В	Std. Error	Beta		
(Constant)	.437	.150		2.917	.000
Cash planning	.649	.057	.834	11.442	.000
Cash budgeting	.168	.081	.205	2.082	.043
Cash collection period	.074	.067	.092	.196	.279
Cash disbursement	144	.050	238	-2.878	.006

## Table 4.15 Coefficient

Table 4.15 presents the regression results on how cash planning, cash budgeting, cash collection period and cash disbursement determine financial performance of commercial banks in Mogadishu Somalia. The multiple regression equation financial performance that:  $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$  and the multiple regression equation became:

Y = 0.437 + 0.649 X1 + 0.168 X2 + 0.074 X3 - 0.144 X4. As depicted in table 4.13, there financial performance positive and significant effects of Cash planning on financial performance of commercial banks ( $\beta = 0.834$ ; t = 11.442; p < 0.05). There financial performance positive and significant effects of cash budgeting on financial performance of commercial banks ( $\beta = 0.518$ ; t = 2.0822.082; p < 0.05). There financial performance positive and insignificant effects of cash performance of commercial banks ( $\beta = 0.74$ ; t = 0.196; p > 0.05).

There financial performance negative but significant effects of cash disbursement on financial performance of commercial banks ( $\beta$  = -0.144; t = -2.878; p > 0.05).

#### Conclusions

Based on the findings of this study, the following conclusions were drawn. The results reveal that cash planning, cash budgeting and cash collection period have positive and significant effects on financial performance, while cash disbursement have negative but significant effects on financial performance of commercial banks in Mogadishu Somalia. These findings indicate that the existing cash disbursement is not so suitable for improving financial performance of commercial banks in Mogadishu Somalia. These result financial performance an emphasis on the role of cash planning, cash budgeting and cash collection period in providing a suitable environment for developing financial performance of commercial banks in Mogadishu Somalia.

#### Recommendations

- 1. There is need for banks to employ knowledgeable and qualified personnel. The right personnel will ensure that the right decisions are made especially with the optimal level of cash and treasury bills and certificates to keep.
- The researcher recommended that There is need for deploying a cash management system which involves support and coordination among multiple departments including Finance, Operations, IT, Security and Loss Prevention to improve financial performance in a company.
- 3. Banks need to pick the right cash management provider who can coordinate the physical and technological installation of the system including mobile banking can significantly expedite and smooth the process of ensuring profit maximization. Each department should carefully

consider features and functionality that will be required for a successful deployment and utilization of cash management which also increases financial performance.

- 4. There is also need to discuss finance management under three main threads as capital budgeting, capital structure and working capital management. The first two of them are mostly related with financing and managing long-term investments. However, financial decisions about working capital are mostly related with financing and managing short-term investments and undertake both current assets and current liabilities simultaneously.
- 5. Administrators should calculate the cash amount best suited for the level of activity, plan timing of relevant payments and collections and draw up a policy of investments in assets with high liquidity that can be converted in to cash allow transaction costs to serve as support for their funds maintained by the company.

# REFERENCES

- Aksoy. A. (2005). *Working Capital Management*. (First Edition). Gazi Publications, Turkey Ankara.
- Alex E. Proimos (2009) *Determinants of Financial performance*. An analysis of large Austrian *firms*, Austrlian Policy Online.

Beranek W. (2009). Analysis for Financial Decisions (15th Edition), Irwin, Homewood.

- Bort. R. (2004) *Corporate cash management handbook*, Warren Gorham and Lamont RAI Group Newyork.
- Brealey M (2005). *Principle of Corporate Finance*, seventh Edition. The McGraw Hill Publishing Company, Delhi.
- Brinker. R. (2002) *Introduction to financial management*, 3<sup>rd</sup> Edition. The dry press Marcourt Brace College Publisher, Orlando.
- Block B Stanley and Hirt A Geoffrey (1987), *Fundamentals of financial management* (4<sup>th</sup> edition) Irwin, Horme Wood.
- Chris F. (2008) *cash management challenges remain emerging liquidity management*. Article 20238557.
- Damondaran. A. (2002). *Investment valuation:* Tools and techniques *for determining the value of any asset.* 2<sup>nd</sup> Edition. John Wiley and Sons Inc.
- Deloof. M. (2003) Does working capital management affect financial performance of Belgian *firms*. J. Business Finance

- Gitman LJ (2008) *Principle of Managerial Finance*, 5<sup>th</sup> edition,, Harper and Raw Publishers, United Kingdom.
- Griffith Williams (2001), Evaluating financial policies and corporate governancein Russia in finance journal Vol. 3, No page 7-13.
- Hurdon, H. (2001) The Economics of Financial Systems, Second edition Black Well Publishers, London.
- Kakuru, Julius (2005), Finance Decisions and the Business, third Edition, Kampala International Publishers, Kampala.
- Kirkman P (2006). *Modern Credit Management*, 3<sup>rd</sup> Edition, George Allen and Unwin, London
- Kakuru Julius (2001), *Financial decisions and business* (2<sup>nd</sup> edition) Business publishing group Kampala.
- McLaney, E. (2006) *Business Finance Theory and practice*, 7<sup>th</sup> edition, Pearson Education, Prentice Hall.
- Marie, Jones (2001) *Business basics Cash flow Management* Published by Chartered Institute of Management Accountants.
- NKundabanyanga S. (2004). Advanced Accounting, The first Edition Makerere University Business School Kampala.
- Lyroudi, K., &Lazaridis, Y. (2000). —The Cash Conversion Cycle and Liquidity Analysis of the Food Industry in Greece.
- Lynch foulks (2005), financial management and control, foulks lynch publishers. Gupta Mahestwaki (1994) meaning of cash.

- Leire San Jose, TxominIturalde, AmaiaMasede (2008). *Treasury Management versus Cash Management*, International Research Journal of Finance and EconomicsManagementVol 6 No.1
- Ondiek, B. A. (2013). Cash Management Techniques Adopted By Small And Medium. *Research Journal of Finance and Accounting*, Vol.4, No.18,.
- Pandey, M. I (2002). *Financial Management*, Eight edition Vikas Publication house PVT ltd, New Delhi.
- Pinkowitz, L. and Williamson, R. (2004), *What is a dollar worth? The market value of cash holdings, Working paper,* Georgetown University, Financial performancehington, DC.

Pandey IM (2003), Finance management(7<sup>th</sup> ED)Vikas publishing firms in Uganda

- Puxty G Anthony and DoddsJ.Collin(1991), *Financial management method and meaning*(2<sup>nd</sup> ED)Champman
- Van Horme C James (1989), Financial; management and policy (9th edition)prentice international inc new Delhi.
- Saleemi, L (2001) *Principle of cost accounting*. A managerial Perspective, Fifth Edition Chatham, London.