## EFFECT OF CASH MANAGEMENT ON THE FINANCIAL

## PERFORMANCE OF COMMERCIAL BANKS

## IN MOGADISHU, SOMALIA.

## AHMED ALI JAJALE

Tel: +252615661370 Email:- jaajaale6613@gmail.com

(MBA Finance of Jomo Kenyatta University of Agriculture and Technology)

## PROF. ABDULLAH IBRAHIM ALI

(Lecturer, School of Human resource and development, Jomo Kenyatta University of agriculture and technology, Email <u>allhyie@yahoo.com</u>)



ABSTRACT:- The general objective of this study was to establish the effect of cash management in the performance of commercial banks in Mogadishu, Somalia. Specifically, this study investigated the effects of capital adequacy, Liquidity Management, receivables management and payables management on cash management in the performance of commercial banks in Mogadishu, Somalia. The goal of the cash management function brought out the basic responsibilities of the cash manager, which, broadly speaking, take up planning, monitoring and controlling of the cash flows and the cash position of a company, while maintaining its liquidity. This study wasconducted through a descriptive study. In addition, the study employed a survey research design in data collection. The sampling procedure of this study was used nonprobability sampling procedure particularly purposive sampling or judgmental sampling. This research employed quantitative data collection method whereby data was gathered by the use of closed ended questionnaires, which were self-administered. The data collected was analyzed using the software called Statistical Package for the Social Sciences (SPSS) version 20 and results shown in terms of frequency distribution and percentages. From the data collected, 48 questionnaires were filled, 42 were returned and 6 missed which represent 88% response rate while 12% was missing. This response rate was considered satisfactory to make conclusions for the study. Mugenda and Mugenda (2003) observed that a 50% response rate was adequate, 60% was good, while 70% rated very good. This implied that based on this assertion, the response rate in this case of 88% was therefore very good. The study results supported the view that cash management drivers had a significant effect on financial performance of commercial banks in Somalia. However, the influence of each driver varied from one bank to another. It is recommended that managers should study and select the driver that best suits their banks in order to achieve maximum performance. Multiple regression analysis was performed to evaluate the relationship between the dependent variable (financial Performance of commercial banks) and the independent variables (capital adequacy, liquidity management, receivables management and payables management) and to test the research on the factors affecting financial Performance of commercial banks in Mogadishu, Somalia. Standard multiple regression analysis was conducted for hypotheses testing (Cooper & Schindler, 2013; Sekaran, 2008), while stepwise 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). The study recommends the adoption of the cash management and financial performance of commercial banks in Mogadishu of dilemma. The cash management models were 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. However, the influence of each driver varies from one bank to another. It is recommended that managers should study and select the driver that best suits their banks in order to achieve maximum performance. It was found that management policies influenced receivables management. It is recommended to the commercial banks management to ensure that the banks have put in place policies and procedures to be adhered during trade credit. The banks management is also urged to ensure that there are standardized and written manuals with the policies regarding trade credit and its management.

# **KEYWORDS:** capital adequacy, liquidity management, receivable management, payable management and financial performance.

#### INTRODUCTION

## **Background of the study**

The objective of this study will present the cash management techniques whose application contributes to achieving efficient and successful cash management. A recent cash management survey, i.e. the Fourth Annual Cash Management survey conducted by Gtnews in association with SEB (2009), revealed that the process with greatest improvement potential within cash management is the management of accounts receivable, whereas improving cash flow forecasting came as second (Gnaws, 2009). In 2006 and 2007 according to the same survey, cash forecasting appeared as the cash management process with the highest improvement potential. That is why, I place greater emphasis on managing accounts receivable and improving cash flow forecasting, as processes in the highest need for enhancement.

According to Horne and Wachowitz (2012), cash management is very vital for production firms whose assets are mostly composed of current assets. Cash management directly affects liquidity and profitability of any firm (Raheman and Nasr, 2013). Particularly, it centres on measuring the effect of cash management on performance of commercial banks just as it dwells on establishing, if any, the association between liquidity and profitability of firms. In a study on the banking sectors of 11 Latin American countries, stipulate that rivalry between banks push the banks to engage in a differentiation processes of the products they supply, and can stimulate cash management.

China has made tremendous progress in the fight against money laundering. This is despite the short history in combating money laundering and insufficiency working experience and the experienced professionals in comparison with other countries such as the UK, Australia and Germany. The progress in China has largely been on account of two things. First, China's red hot

economy has opened to both lawful commercial activities and transnational crimes especially money laundering. Second, China has been striving to bring her legal and regulatory environment to international standards. (Musonda Simwayi, 2011) "The role of commercial banks in combating money laundering", Journal of Money Laundering Control, Vol. 14 Iss: 4, pp.324 – 333.

In South Africa, the regulations under the Banks Act No. 94 of 1990 compel banks to appoint a compliance officer with senior executive status and to maintain an independent and adequately resourced compliance function. This is in recognition of the fact that the banking sector has the most building blocks of a compliance system (De Koker, 2012, p. 168). There are numerous studies of banking sector performance in developed and developing countries (Bourke, 1989; Molyneux and Thornton, 1992; Berger, 1995a; Saunders and Schumacher, 2000) This paper examines the causes of Argentine commercial banking performance over the period 1994-2011. Return on assets (ROA) and net interest margins (NIM) are observed annually together with a matrix of control variables that capture the impact of a set of firm-level, industry-level and macroeconomic variables. Methodologically, the objective is to extend earlier work on microeconomic, macroeconomic and firm-specific factors to determinants of banking sector performance in Argentina – one of the fastest growing economies in the world (Athasanoglu et al., 2013).

Mine EysonDoyran, (2013) "Net interest margins and firm performance in developing countries. Commercial banks play a vital role in the economic resource allocation of countries. They channel funds from depositors to investors continuously. Thus, financial performance analysis of commercial banks has been of great interest to academic research since the Great Depression Intern the 1940's. In the last two decades studies have shown that commercial banks in Sub-Saharan Africa (SSA) are more profitable than the rest of the world with an average Return on Assets (ROA) of 2 percent (Flamini et al., 2011). One of the major reasons behind high return in the region was investment in risky ventures. The other possible reason for the high profitability in commercial banking business in SSA is the existence of huge gap between the demand for bank service and the supply thereof. That means, in SSA the number of banks are few compared to the demand for the services; as a result there is less competition and banks charge high interest rates. This is especially true in East Africa where the few government owned banks take the lion's share of the market. The performance of commercial banks can be affected by internal and external factors (Al-Tamimi, 2010; Aburime, 2005). These factors can be classified into bank specific (internal) and macroeconomic variables. The internal factors are individual bank characteristics, which affect the bank's performance.

These factors are influenced by the internal decisions of management and board. The external factors are sector wide or countrywide factors, which are beyond the control of the company and affect the profitability of banks. Studies show that performance of firms can also be influenced by ownership identity (Ongore, 2011). To study the effect of ownership identity, we introduced the concept of moderating variable. In this study, the ownership identity is classified into foreign and domestic. The domestic vis-à-vis foreign classification is based on the nature of the existing major ownership identity in Kenya. According to Central Bank of Kenya (2011) Supervision Report as of December 2011 out of the 43commercial banks 30 of them are domestically owned and 13 are foreign owned. In terms of asset holding, foreign banks account for about 35% of the banking assets as of 2011. In Kenya, the commercial banks dominate the financial sector. In a

country where the financial sector is dominated by commercial banks, any failure in the sector has an immense implication on the economic growth of the country.

In Somalia, banking system has collapsed in1991 when the civil war broke out in the country, so there wasn't central bank in Somalia for the last 25 years. Some businessmen created commercial banks to ease the transaction costs in the day to day business activities in the country. These commercial banks are included in Dahabshil bank, salaam bank, premier bank and IBS bank, all are domestically owned and they play a great role for the economic growth of the country right now.

## **Statement of the problem**

Capital adequacy, liquidity management, receivable management and payable management have significant and positive effect on financial performance on commercial banks in Mogadishu, Somalia. The goals of the cash management function bring out the basic responsibilities of the cash manager, which, broadly speaking, take up planning, monitoring and controlling of the cash flows and the cash position of a company, while maintaining its liquidity (Coyle, 2010, p. 6). Depending on how many responsibilities it consists of, cash management can be divided into: treasury management (or basic cash management) and advanced cash management. A study of cash management practices in a sample of Spanish firms done by San José et al. (2008, p. 192) confirm that treasury management in a narrow sense or basic cash management, which encompasses the fundamental functions of cash management, has evolved into treasury management in a broad sense, or advanced cash management. According to San José et al. (2008, p. 193) basic cash management involves developing and undertaking administrative measures aimed at establishing the optimal level of cash, that would allow the company to make

and receive payments in such a way that the normal operations of the company are preserved. Such are: short term cash flow forecasting, setting up an optimum cash level, optimizing the liquidity of the company, monitoring and optimizing the cash cycle, monitoring the banking positions at value date, and finally, controlling the banking positions on a daily basis (San José et al., 2008).

Most businesses and companies in Somalia use non cash management method or poor cash management now and that is why a lot of commercial Banks fail, so companies have to follow the principles of cash management system and accounting standards, in order to increase the satisfaction of their customers. Business analysts report that poor cash management and low performance is the major reason why most businesses and banks fail. It would probably be more accurate to say that business and banks failure are due to poor cash management and lack onfinancial performance. Understanding the basic concepts of cash flow will help you plan for the unforeseen eventualities that nearly every business faces. Despite of the existence of the above problem some people face like these problems, and lastly they fail to continue their business due to mismanagement lack sufficient knowledge of running business, and the flow of the cash. As far as this discrepancy is there, the researcher is interested in investigating effect of the cash management on the onfinancial performance on commercial banks in Mogadishu, Somalia and it will recommend the possible solution of managing these obstacles. Somalia itself does not fulfill the cash management and the standard of accounting system generally.

## Specific objectives of the study

The specific objective of the study is as follows:-

- 1. To determine the effect of capital adequacy in the financial performance of commercial banks in Mogadishu, Somalia.
- 2. To analyze the effects of Liquidity Managementin the financial performance of commercial

banks in Mogadishu, Somalia.

- 3. To assess effect receivables management in the financial performance of commercial banks in Mogadishu, Somalia.
- 4. To find out the effect of account payables management in the financial performance of Commercial banks in Mogadishu, Somalia.

## **Conceptual Framework**

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.



#### **Independent variables**

dependent variable



## **Capital adequacy**

Capital adequacy is a reflection of the inner strength of a bank, which would stand it in good stead during the times of crisis. Capital adequacy may have a bearing on the overall performance of a bank, like opening of new branches, fresh lending in high risk but profitable areas, work force recruitment and diversification of business through subsidiaries or through specially designated branches, as the RBI could think these operational dimensions to the bank's capital adequacy achievement (Shankar, 1997). Realizing the importance of capital adequacy, the Reserve Bank of India (RBI) issued directive in 1992, whereby each banks in India was required to meet the capital adequacy standard of 8%, the norm fixed based on the recommendations of Basel Committee.

## Liquidity Management

Liquidity is another factor that determines the level of bank performance. Liquidity refers to the ability of the bank to fulfill its obligations, mainly of depositors. According to Dang (2011) adequate level of liquidity is positively related with bank profitability. The most common financial ratios that reflect the liquidity position of a bank according to the above author are customer deposit to total asset and total loan to customer deposits. Other scholars use different financial ratio to measure liquidity. For instance, Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. However, the study conducted in China and Malaysia found that liquidity level of banks has no relationship with the performances of banks (Said and Tumin, 2011). Forecasts are vital for liquidity management because they give out an early warning signal for liquidity problems by estimating how much cash will be needed, when, for how long and whether it will be available from planned sources (Coyle, 2000, p. 16).

#### **Receivables management**

Firms would in general, rather sale for cash than on credit. However, competitive pressures force most firms to offer credit. Thus, when goods are shipped to customers, inventories is reduced and accounts receivable is created (Brigham & Huston, 2002). The total amount of receivables outstanding is determined by 1) the volume of credit sales and 2) the average length of time between sales and collections. Kakuru (2000) argued that whenever there is competition between the market players in a given industry, selling on credit is inevitable, because the business will lose its customers to the competitors, if it doesn't offer credit to its customers. Basing on that assumption, investment in debtors is not a matter of choice, but a matter of survival.

On the other hand, granting trade credit favors the firm's sales in various ways. Trade credit can act as an effective price cut (Brennan, Maksimovic and Zechner, 1988; Petersen and Rajan, 1997), incentivizes customers to acquire merchandise at times of low demand (Emery, 1987), allows customers to check that the merchandise they receive is as agreed (quantity and quality) and to ensure that the services contracted are carried out (Smith, 1987), and helps firms to strengthen long-term relationships with their customers (Ng, Smith and Smith, 1999).

## **Payables management**

Needles, (2011), state that Accounts payable is money owed by a business to its suppliers shown as a liability on a company's balance sheet It is distinct from notes payable liabilities, which are debts created by formal legal instrument documents. An accounts payable is recorded in the Account Payable sub-ledger at the time an invoice is vouched for payment. Voucher, or vouched, means that an invoice is approved for payment and has been recorded in the General Ledger or AP sub ledger as an outstanding, or open, liability because it has not been paid. Payables are often categorized as Trade Payables, payables for the purchase of physical goods that are recorded in Inventory, and Expense Payables, payables for the purchase of goods or services that are expensed. Common examples of Expense Payables are advertising, travel, entertainment, office supplies and utilities. *Accounts payable* is a form of credit that suppliers offer to their customers by allowing them to pay for a product or service after it has already been received. Suppliers offer various payment terms for an invoice. Payment terms may include the offer of a cash discount for paying an invoice within a defined number of days. For example, 2%, Net 30 terms mean that the payer will deduct 2% from the invoice if payment is made within 30 days.

## **Empirical literature Review**

Empirical literature review is a directed search of published works, including periodicals and books, that discusses theory and presents empirical results that are relevant to the topic at hand (Zikmund et al., 2010). Literature review is a comprehensive survey of previous inquiries related to a research question. Although it can often be wide in scope, covering decades, perhaps even centuries of material, it should also be narrowly tailored, addressing only the scholarship that is directly related to the research question (Kaifeng and Miller, 2008). Review allows a researcher to place his or her research into an intellectual and historical context. In other words, literature review helps the author declare why their research matters (Kaifeng and Miller, 2008). As Nyabwanga (2011) asserts, cash management is the process of planning and controlling cash flows into and out of the business, cash flows within the business, and cash balances held by a business at a point in time (as cited in Pandey, 2004). As Nyabwanga (2011) asserts, efficient cash management involves the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little (as cited in Ross et al., 2008) and as stressed by (as cited in Atrill, 2006), there is need for careful planning and monitoring of cash flows over time so as to determine the optimal cash to hold. 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 agree with the findings 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., 2008) that reducing the time cash is tied up in the operating cycle improves a business's profitability and market value furthers thesignificance of efficient cash management practices in improving business performance.

Erkki (2004) defined cash management as a part of treasury management, which is defined as a part of the main responsibilities of the central finance management team(as cited in Tiegen, 2001). Huseyin (2011) asserts, the specific task of a typical treasury function include cash management, risk management, hedging and insurance management, account receivable management, account payable management, bank relations and investor relations (as cited in Kytönen, 2004). (Huseyin, 2011) thinks that this definition is consistent with the (as cited in Srinvasan & Kim, 1986) classification of cash management areas as cash balance

management, cash gathering, cash mobilization and concentration, cash disbursement, and banking system design. Cash balance management includes management of cash position, shortterm borrowing, short term investing, cash forecasting. (Huseyin, 2011) opinion is that the classifications of Tiegen's cash management and Srinvasan and Kim's cash balance management are closely related concepts. (Huseyin, 2011) classifies cash management as operating transactions and financial transactions. The operating transactions include accounting ledgers, invoicing, terms of sales - cash collection, cash control and processing, cash forecasting. The financial transactions include optimization of cash, short-term investments, short term borrowing, interest rate risk management, exchange rate risk management, payment systems, and banking investor relations (as cited in Kytönen, 2004). As Jared (2013) asserts, the cooperative form is therefore regarded as having enormous potential for delivering pro-poor growth that is owned and controlled by poor people themselves. Nevertheless, it is recognized that, lacking in capital and business management capacity, cooperatives have had a rather disappointing history in developing countries (as cited in Birchall, 2004). There is an argument then that it is the broader characteristics of cooperative organization such as social ownership, people-centred objectives and their community base, rather than their precise organizational form should be advocated. According to (Mwaura, 2010) — banks are expected to turn to the members for money needed to reach the threshold. Contributing money for the capital build-up will force members to take a portion of their monthly take-home or forego annual dividends in the next four years in support of the initiative. As Darek (2012) asserts, the problem of access to capital becomes even more challenging in emerging markets for a variety of reasons (as cited in Benedict and Venter, 2010; Cunningham and Rowley, 2010; Klonowski, 2005; Abor and Biekpe, 2006; Tagoeet al., 2005). First, firms in emerging markets operate in an environment of imperfect legal infrastructure (as cited in Cunningham and Rowley, 2010; Klonowski, 2005). Capital providers must often agree to contractual terms that are suboptimal for them. Second, financial disclosure in emerging markets continues to be relatively poor (as cited in Sami and Zhou, 2008; Zhou, 2007; Klonowski, 2007). As Darek (2012) asserts, many countries report financial results under their own financial standards and regulations, which are different from those seen in international accounting standards; consequently, auditing firms. (as cited in Klonowski, 2007; Tagoeet al., 2005). Access to information is a greater challenge to obtain, as sources of information on firms, the competitive posture of market players, and market size and growth rates are more difficult to find (as cited in Abor and Biekpe, 2006; Tagoeet al., 2005). (as cited in Black et al., 2010; Klonowski and Golebiowska-Tataj, 2009; Parisiet al., 2009; Klonowski, 2007). Key issues may include the personal use of a firm's assets, unaccounted cash withdrawals, appointment of family members, and so on.

#### **Research** gaps

From the foregoing review of relevant literature, it is evident that research in the area of cash management has been done but not in a comprehensive approach. All the literature reviewed

indicates that previous researchers only concentrated on a few variables of cash management while this study covers additional important variables that were omitted by previous studies. This makes the study more comprehensive. From survey of relevant literature, it has been found that there are few studies specific to Somalia on the link of effect of cash management on performance of commercial banks and they omitted moderating variables. This study therefore intends to fill these pertinent gaps in literature by studying the effects of cash management on selected key performance indicators of commercial banks in Somalia.

#### METHODOLOGY

This study was conducted through a descriptive study; the purpose of descriptive research is to describe an accurate profile of people, events or situations. In addition, the survey has been used and collecting primary data process of this study (Robson, 2002). However this study was used both qualitative and quantitative approaches; Qualitative approach uses predominantly a technique like interview and focus group interview whereas Quantitative is any data collection technique (such as questionnaire) or data analysis procedure (such as graphs or statistics) that generates or uses numerical data (Saunders et al, 2009).

Population refers to the entire group of people or things of interest that the researcher wishes to investigate, Sekaran (2010). There are 4 commercial banks in Mogadishu. TheTarget population of this study was 160 where 60 of them were drawn from the Salam bank, 45 from Dahabshil bank, 27 from Premier bank and 28 from IBS bank in Mogadishu. Employees involved in banks give responses. The sampling frame describes list of all population units from which the sample would be selected (COOPER &Schindler, 2013). It is a physical representation of the target population and comprises all the units that are potential members of a sample (Kothari, 2013). The sampling procedure of this study was used non-probability sampling procedure particularly purposive sampling or judgmental sampling. The researchers would select this sampling

technique because it gives the opportunity to choose the member target population who provides the accurate information or data (Saunders, et al, 2009). Judgmental sampling is a way to select population members who are good prospects for precise information. The sample method which was used this study was 30% of employee of business companies in Mogadishu according to Mugenda and Mugenda (2003).

#### DATA ANALYSIS AND PRESENTATION RESULT

Data analysis is a process of analyzing all the information and evaluating the relevant information that can be helpful in better decision-making, Silvia and Skilling (2006). The data collected was analyzed using the software called Statistical Package for the Social Sciences (SPSS) version 20.

#### Table 4.1 response rate

Questionnaires distributed	Returned	Percentage %	
48	42	88%	

From the data collected, 48 questionnaires were filled, 42 were returned and 6 missed which represent 88% response rate while 12% was missing. 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 88% is therefore very good. The recorded high response rate can be attributed to the data collection procedures for instance, the researcher prenotified 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.

#### **4.3.1 Reliability ( Coefficient of the study variables)**

Variables	Cronbach's Alpha	Comments
Capital adequacy	0.851	Accepted
Liquidity Mgt	0.837	Accepted
Receivable Mgt	0.820	Accepted
Payable Mgt	0.815	Accepted

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 capital adequacy had a coefficient of 0.823, liquidity management had a coefficient of 0.792, receivable management had a coefficient of 0.720, while payable management obtained a coefficient of 0.715 and performance of commercial banks had 0.70 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 studies (Hair, Black, Barry, Anderson, & Tatham, 2006; Malhotra, 2002).

#### Table 4.3: Factor analysis -KMO and Bart

KMO and Bartlett's Test						
Kaiser-Meyer-Olkin Measure of Sampling Adequacy783						
	Approx. Chi-Square	99.415				
Bartlett's Test of Sphericity	df	10				
	Sig.	.000				

Factor analysis was used to check validity of the constructs. Kaiser-Mayor-Oklin measures of sampling adequacy (KMO) & Bartlett's Test of Sphericity is a measure of sampling adequacy that is recommended to check the case to variable ratio for the analysis being conducted. In most academic and business studies, KMO & Bartlett's test play an important role for accepting the sample adequacy. While the KMO ranges from 0 to 1, the world-over accepted index is over 0.5. In addition, the Bartlett's Test of Sphericity relates to the significance of the study and thereby shows the validity and suitability of the responses collected to the problem being addressed through the study. For Factor Analysis to be recommended suitable, the Bartlett's Test of Sphericity must be less than 0.05.

The study applied the KMO measures of sampling adequacy and Bartlett's test of sphericity to test whether the relationship among the variables has been significant or not as shown in below in table 4.3. Factor 1 was based on four items that represented capital adequacy; Factor 2 was based on four items that represented liquidity management, Factor 3 was based on four items that represented receivables management, and Factor 4 with four items represented payables management. While the last Factor was based on four items that represented performance of commercial banks. The Kaiser-Mayor-Oklin measures of sampling adequacy shows the value of

test statistic as .783, which is greater than 0.5 hence an acceptable index. While Bartlett's test of sphericity shows the value of test statistic as 0.000 which is less than 0.05 acceptable indexes. This result indicates a highly significant relationship among variables.

						financial
		CA	LM	RM	PM	performance
Capital adequacy	Pearson Correlation	1	.232	.063	.361*	.411**
	Sig. (2- tailed)		.140	.691	.019	.007
	Ν	42	42	42	42	42
Liquiditymgt	Pearson Correlation	.232	1	.640**	.627**	.780**
	Sig. (2- tailed)	.140		.000	.000	.000
	N	42	42	42	42	42
Receivable mgt	Pearson Correlation	.063	.640**	1	.307*	.454**
	Sig. (2- tailed)	.691	.000		.048	.003
	N	42	42	42	42	42
Payable mgt	Pearson Correlation	.361*	.627**	.307*	1	.621**
	Sig. (2- tailed)	.019	.000	.048		.000
	N	42	42	42	42	42
Financial performance	Pearson Correlation	.411**	.780**	.454**	.621**	1
performance	Sig. (2-	.007	.000	.003	.000	
	tailed) N	42	42	42	42	42

#### **Table 4.14 Correlation**

Pearson Bivariate correlation coefficient was used to compute the correlation between the dependent variable financial performances) and the independent variables (capital adequacy, liquidity management, receivable management and payable management). According to Sekaran (2008), this relationship is assumed to be linear and the correlation coefficient ranges from -1.0(perfect negative correlation) to +1.0 (perfect positive relationship). The correlation coefficient was calculated to determine the strength of the relationship between dependent and independent variables (Kothari, 2013). From table 4.14, the results generally indicate that independent variables (capital adequacy, liquidity management receivable management and payable management) were found to have positive significant correlations on financial performance at 5% level of significance. There was a strong positive and highly significant correlation between capital adequacy and financial performance (r = .780, P > 0.05). There was a strong positive and highly significant correlation between liquidity management and financial performance (r = .621, P < 0.05). There was a moderate positive and significant correlation between receivable management and financial performance (r = .454, P < 0.01). There was a moderate positive and significant correlation between payable management and financial performance (r = .411, P < 0.05). The results imply that capital adequacy, liquidity management, receivable management and payable management significantly influenced financial performance on commercial banks in Mogadishu, Somalia.

#### Table 4.15 Regression Coefficients analysis

Table 4.12 presents the regression results on how capital adequacy, liquidity management, receivables management and payables management determine the financial performance of commercial banks in Mogadishu, Somalia. The multiple regression equation was that:  $Y = \beta 0 + \beta 1 X 1 + \beta 2 X 2 + \beta 3 X 3 + \beta 4 X 4 + \epsilon$  and the multiple regression equation became: Y =

.235+.272X1+.263X2 + .355X3 +.314X4 .As depicted in table 4.13, there was positive and significant effects of capital adequacy on the performance of commercial banks ( $\beta$  = .253; t = 3.092; p < 0.05). There was positive and significant effects of liquidity management on the performance of commercial banks ( $\beta$  = .275; t = 2.509; p < 0.05). There was a strong positive and significant effects of receivables management on the **financial performance of commercial banks** ( $\beta$  = .278; t = 2.798; p < 0.05) However, there was also positive insignificant effects of bank performance ( $\beta$  = .351; t = 3.467; p > 0.05).

 Table 4.13 Model Summary

Model	R	<b>R</b> <sup>2</sup>	Adjusted R <sup>2</sup>
1	.891	.793	.771

Model summary is a summery that describes how far the in dependent variables explain the dependent variables that mean the greater R value has the great number the greater independent variables explain with dependent variable. In order to test the research, a standard multiple regression analysis was conducted using Performance of commercial banks as the dependent variable, and the four determinants of financial Performance of commercial banks: capital adequacy, liquidity management, receivables management and payables management as the predicting variables. Tables 4.10, 4.11 and 4.12 present the regression results. From the model summary in table 4.10, it is clear that the adjusted R<sup>2</sup> was 0. 642 indicating that a combination of capital adequacy, liquidity management, receivables management and payables management explained 64.2% of the variation in the Performance of commercial banks in Mogadishu, Somalia.

ANOVA							
Model	Sum of Squares	Df	Mean Square	F	Sig.		
Regression	12.701	4	3.175	35.533	.000		
Residual	3.306	37	.089				
Total	16.007	41					

 Table 4.14 Analysis of Variance

From the ANOVA table 4.12, it is clear that the overall standard multiple regression model (the model involving constant, capital adequacy, liquidity management, receivables management and payable management) is significant in predicting how capital adequacy, liquidity management, receivables management and payables management determine the performance of commercial banks in Mogadishu, Somalia. The regression model achieves a high degree of fit as reflected by an R2 of 0.793 (F = 35.533; P = 0.00 < 0.05).

#### Multiple regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
	В	Std. Error	Beta		
(Constant)	.235	.233		1.009	.019
Capital Adequacy	.272	.088	.253	3.092	.004
Liquidity mgt	.263	.105	.275	2.509	.017
Receivables mgt	.355	.102	.351	3.467	.001
Payables mgt	.314	.112	.278	2.798	.008

#### **Table 4.15 Regression Coefficients**

#### a. Dependent variable: financial Performance of commercial banks

Table 4.12 presents the regression results on how capital adequacy, liquidity management, receivables management and payables management determine the financial performance of commercial banks in Mogadishu, Somalia. The multiple regression equation was that: Y=  $\beta 0+\beta 1X1+\beta 2X2+\beta 3X3 + \beta 4X4+\epsilon$  and the multiple regression equation became: Y = .235+.272X1+.263X2 + .355X3 +.314X4 .As depicted in table 4.13, there was positive and significant effects of capital adequacy on the performance of commercial banks ( $\beta$  = .253; t = 3.092; p < 0.05). There was positive and significant effects of receivables management on the financial performance of commercial banks ( $\beta$  = .275; t = 2.509; p < 0.05). There was a strong positive and significant effects of receivables management on the financial performance of commercial banks ( $\beta$  = .278; t = 2.798; p < 0.05) However, there was also positive insignificant effects of bank performance ( $\beta$  = .351; t = 3.467; p > 0.05).

#### Conclusions

Bank performance of commercial banks has a strong positive and highly significant correlation on capital adequacy, liquidity management, receivable management and payables management. When all the stated variables were tested in the regression model they were found to have a significant relationship between themselves and performance of commercial banks. The study resulted support the view that cash management drivers have a significant effect on performance of commercial banks in Somalia. However, the influence of each driver varies from one bank to another. It is recommended that managers should study and select the driver that best suits their banks in order to achieve maximum performance. It was concluded that commercial banks needed to embrace cash management drivers in order to achieve sustainable competitive advantage. The results obtained from this study were important in terms of reflecting the situation on the usage and performance levels of cash management drivers of financial performance in commercial banks. The results further revealed a positive relationship between the individual cash management drivers and bank performance. The results provide an insight to banks managers on the importance of the use of cash management in all commercial banks in Somalia.

## **Recommendations**

1- The study recommends the adoption of the cash management and financial performance of commercial banks in Mogadishu of dilemma.

2- The cash management models were recommended as a useful design for practicing commercial banks with respect to the implementation of best practice.

3- The study results support the view that cash management drivers have a significant effect on financial performance of commercial banks in Somalia. However, the influence of each driver varies from one bank to another.

4- It is recommended that managers should study and select the driver that best suits their banks in order to achieve maximum performance. It was found that management policies influenced receivables management.

5- It is recommended to the commercial banks management to ensure that the banks have put in place policies and procedures to be adhered during trade credit.

6- The banks management is also urged to ensure that there are standardized and written manuals with the policies regarding trade credit and its management.

There is need for the regulator to introduce cash management controls that will be applied across all the effect of cash management on the financial performance of commercial banks in Mogadishu. This will go way further towards increased cash management in the sector and contributes towards better performance in the commercial banks sector.

#### REFERENCES

- Acharya, R. N., & Kagan, A. (2004). Commercial B2B Web site attributes within the perishable sector. Journal of Internet Commerce, 3(4):79-91.
- Alexandru, C., Genu, G., & Romanezcu, M. (2008). The Assessment of Banking Performances-Indicators of Performance in Bank Area. New york: New york press.
- Allman, W. M., & J, S. (2003). Essentials of managing corporate cash.
- Al-Tamimi, H. H. (2010). Factors Infuluncing Performance of the UAE Islamic and Conventional National Banks. Sharjah: University of Sharjah.
- Anbalagan, C. (2011). Impact and role of technology in modern financial innovation and invention.
- Armour, J., & Cumming, D. J. (2008). Bankruptcy law and entrepreneurship. American Law and Economics Review, 303-350.
- Atanassov, J., Nanda, V., & Seru, A. (2007). Finance and innovation: The case of publicly traded firms.
- Brigham, E. F., & Daves, P. R. (2004). Intermediate Financial Management (8th ed.).
- Cobham, A. (2000). Taxation policy.
- Cohen, L., Manion, L., & Morrison, K. (2000). Research Methods in Education (5th edition).
- Coyle, B. (2000). Flow Management. Chicago & London: Cash Flow Forecasting and Liquidity.
- de Caux, T. (2005). Cash Forecasting. The International Treasurer's Handbook. London: London Association of Corporate Treasurers.
- Fabozzi, F. J., & Peterson, P. P. (2003). Financial Management and Analysis (2nd ed.). New York: John Wiley & Sons, Inc.

- Fang, W., Tian, X., & Tice, S. (2010). Does stock liquidity enhance or impede firm innovation. Rutgers: Rutgers University.
- Flamini et al (2009) The Determinants of Commercial Bank
- Foster, B. P. (1997). Corporate Cash Management: Strategy and Practice (2nd ed.). Cambridge: Woodhead Publishing Ltd.
- Gtnews, & SEB. (2009). Cash management survey 2009: Corporates put accounts receivable and centralization in the spotlight.
- Harriott, K. (2000). Essential Facts. Kingston.
- Hirtle, B. J., & Stiroh, K. J. (2007). The return to retail and the performance of U.S. banks. Journal of Banking and Finance , 1101-1133.
- Ilhomovich, S. E. (2009). Factors affecting the performance of foreign banks in Malaysia. Malaysia.
- J, L. (2003). Enterprise Risk Management: From Incentives to Controls. New York.
- Joshi, V. C. (2002). Managing Indian Banks: The challenges Ahead. Response Books , 106-108.
- Lam, J. (2003). Enterprise Risk Management: From Incentives to Controls. New York: John Wiley & Sons.
- Lerner, J. (2006). Where does State Street lead? A first look at finance patents. Journal of Finance, 901-930.
- Matassi, G. M. (2008). An Integrative Approach to Cash Flow Forecasting. New York.
- McIntosh, H. (2005). How the Foreign Exchange Market Works. Kingston: Bank of Jamaica.
- Robinson, F. (2004). Balance of Payments. Nethersole Place.
- Said, R. M., & Moh, H. T. (2011). Performance and Financial Ratios of Commercial Banks in Malaysia and China. Malaysia .

- San José, L., Iturralde, T., & Maseda, A. (2008). Treasury Management Versus Cash Management. International Journal of Finance and Economics , 1450–2887.
- Subramanian, A., Sapra, S., & Subramanian, K. (2009). Corporate governance and innovation: Theory and evidence. Chicago: University of Chicago.
- Yildirim, H. S., & Philippatos, ,. G. (2007). Competition and contestability in central and eastern European banking markets. Manage Finance: 195-209.
- Zikmund, G. W., Babin, B. J., Carr, C. J., & Griffin, M. (2010). Business Research Methods 8th ed. South-Western: Cengage Learning.

