

Liquidity Management as a Determinant of Cash Flow Management on Performance of Selected Commercial Banks in Kisumu County, Kenya

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Abstract: Cash flows are narrowly interconnected with the concepts of value, interest rate and liquidity (Auerbach, A. J., & Devereux, M. P. (2013). The purpose of the study was to analyze the effect of liquidity as a determinant of cash flow management on performance of commercial banks in Kisumu County, Kenya. The study was based on Portfolio theory of Cash Management, Cash Management theory, Transaction Cost theory, Free Cash Flow theory and pecking order theory. The study adopted a descriptive research design. The target population of the study was 50 employees in management and supervisory cadres in commercial banks in Kisumu County, Kenya. Census was adopted since the target population is small. A data collection instrument was questionnaire. Piloting was done in commercial banks in Kericho County for testing the validity and reliability of the research instrument. A data collection method was both primary and secondary. The data was analyzed using Statistical Program for Social Sciences (SPSS) windows version 23. Multiple linear regression analysis was carried out to analyze the determinants of cash flow management on performance of commercial banks in Kisumu County, Kenya. Regression analysis was carried out to test the significant levels of one variable to the other in the study. ANOVA was carried out to test the hypotheses of the study. The finding of the study revealed that liquidity management, was found to be positively related to performance of commercial banks in Kisumu County, Kenya. From t-test analysis, the t -value was found to be 2.313 and the ρ -value 0.000. Statistically, the null hypothesis was rejected because $\rho < 0.05$. Thus, the study accepted the alternative hypothesis and it concluded that liquidity affects performance of commercial banks in Kisumu County, Kenya. The study will be significant to the banking sector and the government of Kenya in formulation of different financial decisions and in policy making.

Keywords: Liquidity Management, Performance.

1. BACKGROUND

Cash flows are narrowly interconnected with the concepts of value, interest rate and liquidity (Auerbach, A. J., & Devereux, M. P. (2013). Cash flow notion is based loosely on cash flow statement accounting standards. The term is flexible and can refer to time intervals spanning over past-future(Devereux, (2016).Cash flow, the lifeblood of the firm, is the primary focus of the financial manager both in day- to – day finances and in planning and making strategic decisions focused on creating shareholder value (Gitman, 2008). Cash flow is the difference in amount of cash available at the beginning of a period referred in Accounting terms as opening balance and the amount at the end of that period referred as closing balance (Brown and Moloney, 2002). Cash coming into the business is referred to as cash inflows. This happens mostly through sales of goods or services. Cash going out of the business is referred to as cash outflows (Dechow, 1994).

This results from the need to pay for costs such as raw materials, transport, labor, and power. The difference between the two is called net cash flow. This is either positive or negative. A positive cash flow occurs when a business receives more money than it is spending. This enables it to pay its bills on time. A negative cash flow means the business is receiving less cash than it is spending (Beaver, 2009).

Lawrence Gitman and Chad J. Zutter (2019) state that maintaining proper cash flow is a short run objective of financial management. It is necessary for operations to pay the day-to-day expenses e.g. raw material, electricity bills, wages, rent etc. A good cash flow ensures the survival of company. The cash component of the current assets of an organization refers to the currency holdings (notes and coins), demand deposits and other money market accounts belonging to the organization. The management of cash is concerned with managing of cash flows into and out of the firm, cash flows within the firm, and cash balances held by the firm at any particular time (Saleem, 2013).

Cash management refers to a broad area of finance involving the collection, handling, and usage of cash. It involves assessing market liquidity, cash flow, and investments (Euromoney Cash Management Survey (2016)). Pandey (2013) documented that cash management involves managing monies of the firm to maximize cash availability and interest income on any idle funds. At one end the function starts when a customer writes a cheque to pay the firm on its accounts receivable and ends when a supplier, an employee, or the government, realizes collected funds from the firm on an account payable or accrual. All activities between these two points fall within the realm of cash management. The firm's efforts to get customers to pay their bills at a certain time fall within accounts receivable management. On the other hand, the firm's decision about when to pay its bills involves accounts payable and accrual management. (Abioro, 2013) documented that once the cash budget has been prepared and appropriate net cash flow established, the finance manager should ensure that there does not exist a significant deviation between projected cash flows and actual cash flows. To achieve this, cash management efficiently will have to be improved through a proper control of cash collection and disbursement. Attom, (2014) declared that the success of enterprises largely depends on a number of factors including cash management practices. (Barret, 1999) stated that the underlying objective of cash management is having enough cash available as and when needed and that sound cash management involves better timing of expenditure decisions, earlier collection and banking of revenue and more accurate forecasts.

Liquidity refers to the ease with which an asset, or security, can be converted into ready cash without affecting its price. Liquidity describes the degree to which an asset can be quickly bought or sold in the market at a price reflecting its intrinsic value. Cash is universally considered the most liquid asset because it can most quickly and easily be converted into other assets. Tangible assets, such as real estate, fine art, and collectibles, are all relatively illiquid. Other financial assets, ranging from equities to partnership units, fall at various places on the liquidity spectrum. Liquidity management is a cornerstone of every treasury and finance department. Those who overlook a firm's access to cash do so at their peril, as has been witnessed so many times in the past. In essence, liquidity management is the basic concept of the access to readily available cash in order to fund short-term investments, cover debts, and pay for goods and services. (Nwaezeaku, 2008) defined liquidity as the degree of convertibility to cash or the ease with which any asset can be converted to cash sold at a fair market price. (Ross et al., 2009) explained that conceptually, 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.

(Cooley and Pullen, 2009) submitted that cash management is the process of planning and controlling cash flows. It consisted of three basic components: cash forecasting practices, cash surplus investment practices and cash-control practices. (Atrill, 2010) affirmed that there is need for careful planning and monitoring of cash flows over time so as to determine the optimal cash to hold. (Lienert 2009) found out that modern cash management has four major objectives, namely; to ensure that adequate cash is available to pay for expenditures when they are due, to borrow only when needed and to minimize government borrowing costs, to minimize returns on idle cash and to manage risks, by investing temporary surpluses productively, against adequate collateral. Banking sectors play an important role in economic development by mobilizing savings into investment activities (Mordi, 2002) and in the creation of wealth by facilitating capital formation, enhancing economic growth and development, reducing information costs and offering risk management services (Dogarawa, 2011). Banking system reforms may be initiated by the government in developing, as well as developed countries, to remedy any deficiencies undermining the banking system (Yusuf & Sheidu, 2015). Companies all over the world have continuously operated on an ever changing environment calling in for proper

management of scarce resources financially. Effective cash management is the fundamental standing point to ensure that the firm's finances are in strong position. Further the cash management is very vital for production firms whose assets are mostly composed of current assets (Hornead Wachowity 1998). According to (Raheman & Nasir, 2007) said that cash management directly affects liquidity.

The world economy faced its most dangerous crisis since the Great depression of the 1930s. The contagion, which began in 2007 when sky- high home prices in the United States finally turned decisively downward, spread quickly, first to the U.S. financial sector and then to financial markets overseas. The carnage was not limited to the financial sector, however, as companies that normally rely on credit suffered heavily. In December, the National Bureau of Economic Research, the private group recognized as the official arbiter of such things, determined that a recession had begun in the United States in December 2007, which made this already the third longest recession in U.S. since World War II (Havemann, 2008). (Hillier et al., 2013) explained that in recent years, many companies have found cash very difficult to come by. As most people know, many banks ran out of cash in 2008 and 2009 as bad debts, lack of short term financing, and poor profitable opportunities combined to cause the most severe crisis in the financial sector for decades. Governments stepped into the breach and used taxpayers' money to shore up their financial institutions, Canada's financial system successfully navigated the global financial crisis, and stress tests suggest that major financial institutions would continue to be resilient to credit, liquidity, and contagion risks arising from a severe scenario. The regulated and supervisory framework is strong, and is complemented by a credible federal system of safety nets, although there is no single body with an explicit mandate to take a comprehensive view of system risks or undertake crisis preparedness (IMF, 2014). U.K commercial real estate has been buoyant: annual price growth peaked in early 2015 above 10 per cent per annum. After the recession, domestic banks have reduced their commercial real estate exposures, but international investors have picked up the slack and now account for more than one half of commercial real estate financing flows (IMF, 2014). Recently, Akpan et al. (2018) examine the cash flow management impact on operating performance of Nigerian banks during 1995-2012 and found a significant improvement in the investment banks after experiencing cash flow issues. Likewise, Abdou et al. (2016) find a positive influence of cash flow management on the financial performance of Nigerian banks. Hassen et al. (2018) examine the impact of cash flow management on 60 banks in 17 European countries during the period 2005-2013. They posit that cash flow management has a positive effect banks performance.

Cash flow management very important especially in managing the financial performance of the firms. There is a realization that firm's survival depends largely on the financial resources is management. Many firms have gone down the reasons of poor management of the financial resources of a firm. A recent study by Global Financial Integrity estimates illicit financial flows out of developing counties at 858 billion U.S. dollars to 1.06 trillion U.S. dollars per year. Amongst developing countries, Africa presents the most analytical difficulties because countries with inadequate data account for nearly 37 per cent of regional GDP. One thing is certain: while African countries have had to shoulder a heavy debt burden, a number of researchers such as (Ndikumana, 2008), have shown that sustained illicit outflows have turned the continent into a net creditor to the rest of the world (IMF, 2014). Seminal research at Global Financial Integrity on the absorption of illicit funds show that while some of the private assets held outside their countries by developing country nationals may be legitimate, the bulk of such funds are certainly not. This is because an estimate of illicit capital outflows provided by economic models such as the world Bank residual model and the trade misinvoicing model account for the bulk of deposits reported by banks to the Bank for International Settlements and by offshore financial centers (IMF, 2014).

Donnelly (2015) affirmed that financial flows from Africa are a large growing problem. Averaging 4% of gross domestic product, they are outstripping foreign direct investment and official development aid to the continent. Africa lost an annual average of 60.3 billion US dollars, or around 4 % of GDP in illicit outflows between 2003 and 2012. During the same period, Official Development Aid and Foreign Direct Investment averaged 42.1 billion US dollars and 43.8 billion US dollars respectively. Research estimates that Africa's capital stock would have increased by more than 60% if these illicit funds remained on the continent, while GDP per capita would be 15% higher. (Donnelly, 2015) confirmed that these unlawful money flows involve practices such as tax evasion-through trade misinvoicing and abusive transfer pricing-money laundering, bribery by international companies and abuse of office by public officials. Referencing research done by a high level panel of the African Union and United Nations Economic Commission for Africa examining illicit financial flows, noted that large commercial corporations account for the vast majority, or 65%, of illicit money flows, following by organized crime (30%) and corrupt practices (5%).

Cash flow management is an ongoing challenge for organizations managers as they pay little attention to it and they have failed to recognize the effect of cash deficiency on the return on assets, equity and operation of the company (Uwonda & Okello (2013). According to (Ndungu & Oluoch, (2016) did a study on effect of cash flow on financial performance and showed that cash flows from cash flows from investing, financing and free cash flows all had a negative effect of the market performance of construction companies. Firms on a local perspective have had problems of managing cash flows. (Holt, et al 1999) explained that commercial Banks are the largest financial institutions and contribute immensely to economic growth. The main functions of Commercial Banks today are to lend money, accept deposits, and transfer money among businesses, other banks and financial institutions and individuals. The most common types of financial institutions include Commercial banks, Savings and loan associations, Mutual savings banks and Credit unions but Commercial banks make almost 40 percent of all mortgage loans and almost 50 percent of all other loans. World Bank, (2012) observed that coupled with its recent development of an attractive industry, Kenya has in the recent past maintained steady economic growth with a current GDP of 79.66 billion dollars, per capita of 1,796 dollars, and an average GDP growth rate of 4.8 per cent. Nationally Kenya's financial stability has grown in terms of its contribution to overall Domestic Product (GDP). However, there are downside risks to Kenya's macro- financial conditions. Maintaining an optimum cash amount calls for proper management of cash flows (Matoha, 2007). Firms with good cash management systems are also able to make any investments decisions needed to compete (Matoha, 2007). Most studies in construction management have focused on construction projects and not on the performance of construction companies. Shaban (2008) did a study on factors affecting performance of construction projects in Gaza, Palestine. He found out that the main issues affecting performance were cost, time management and safety. Auma (2014) did a similar study in Kenya, citing that there was an increase in the number of stalled projects due to problems such as high cost of materials, time management, quality management and the leadership style adopted on site. Her remarks on the complex nature of the construction industry is that there are a large number of parties involved such as clients, contractors, consultants, stakeholders, investors, regulators and others. Cash flow management is important for a company's success but it's also dependent on the successful management of the company involved (Nguku, 2015)

Domestically, the banking subsector faced liquidity risks coupled with skewed distribution and corporate governance issues that resulted in two banks being placed under receivership in 2015; and a third bank for the first half of 2016, for the first time in over a decade. Koech, (2012). Relationship between liquidity and return of stock at the Nairobi securities exchange and found out that there exist a relationship. One bank is undergoing liquidation process, while another one was re-opened. Commercial banks contribute to; mobilising saving for capital formation, financing industry, financing trade, agriculture and also helps in monetary policy. Moreover in Kenya, the commercial banks have contributed to 20% of GDP and have generated averagely 45% of employment .Despite the importance of the sector, the commercial banks in Kisumu County are yet to reach with the optimal demands of the customers whose literacy level is steadily increasing by 15% as compared to other counties. The subsector also recorded increased credit risks, with Non-Performing Loans (NPLs) rising faster than historical trends and credit to private sector slowdown to about 14 per cent of GDP Financial Stability Report, (CBK, 2016).The year 2015 also experienced exchange rates and interest rates volatility in Q1 through Q3 that impacted credit markets negatively (CBK, 2015). According to MC Vaish, (2015) one finds it convenient to hold some cash on which one can lean readily when some unforeseen need arises. (Holt, et al 1999) explained that commercial Banks are the largest financial institutions and contribute immensely to economic growth. The main functions of Commercial Banks today are to lend money, accept deposits, and transfer money among businesses, other banks and financial institutions and individuals. The most common types of financial institutions include Commercial banks, Savings and loan associations, Mutual savings banks and Credit unions but Commercial banks make almost 40 percent of all mortgage loans and almost 50 percent of all other loans. Saleem (2013) documented that a commercial bank is a financial institution which deals with money, credit and is established to make profit. The main source of earnings of these banks is the interest charged on loans advanced to customers. A commercial bank accepts deposits from individuals, firms and companies and offers a certain interest and gives loans to those who need them at a higher interest rate. (Gitman& Chad, 2013) declared that commercial banks are among the most important financial institutions because they provide savers with a secure place to invest funds and they offer both individuals and companies loans to finance investments, such as the purchase of a new home and the expansion of a business. The traditional business model of commercial banks is taking in and paying interest on deposits and investing those funds back at higher interest rates-works to the extent that depositors believe that their investments are secure (Joshi, 2011).

According to Benedikt et al., (2007), cash management guidelines for commercial banks in U.S. observed that increases in cash financial strategies assist commercial banks to obtain mortgage stage. Gaitho, (2010) conducted a survey of cash management practices with the aid of SACCOs in Nairobi and revealed that majority of the SACCOs use cash planning practices to mitigate risks as a foundation for objective chance appraisal. Ngumi, (2013) on the effect of bank innovations on financial performance of commercial banks in Kenya found out that bank innovations influence the financial performance of commercial banks. The adoption of innovations by commercial banks has a high potential of improving financial performance and hence better returns to the shareholders. The versatility of innovations has made their adoption rate to be high among both banks and their customers. Cash flow management is a critical aspect in managing the performances of firms worldwide. (Muthama, 2016) did a study on effects of cash management practices on operational performance of selected public hospitals and that cash budgets may not interfere with the attainment of the hospital's goals and neither can it create competition of resources and policies. (Abdifatah, 2010) conducted a study on the link between liquidity threat and profitability of commercial banks in Kenya and found out that money collection of Kenyan commercial banks is affected negatively because of the liquidity gap and leverage. (Weda, 2015) carried out a study on influence of working capital management practices on financial performance of small and medium manufacturing enterprises and the findings revealed that many firms prepare cash budgets on monthly periods. According to Ravi (2012) money control, cash making plans and cash budgeting have a negative effect on banks' economic overall performance and managing it is an important aspect. The profitability of a bank is characterized by its ability to engender earnings being compared against its expenditure and other related costs over a particular time period (Fridson & Alvarez, 2011). Profitability ratios measure the company use of its assets and control of its expenses to generate an acceptable rate of return (Muhammad et al., 2016; Williams et al., 2006). Further, (Oral & Yolalan 1990) indicate that DuPont analysis is an effective proxy for measuring the profitability of a bank. DuPont analysis combines various profitability indicators and uses its collective benefits to make implications regarding the profitability of a bank. There are numerous determinants of liquidity identified as being abundantly used in the relevant literature. For instance, Akhavein et al. (1997) find that there is a significant positive impact of pre and post-cash flow management on the profitability of banks. Likewise, Sinha and Gupta (2011) indicate that there is a positive effect of cash flow management on the performance of banks. Nonetheless, Kouser & Saba (2011) find a negative association between cash flow management and profitability of banks.

Cash flow notion is based loosely on cash flow statement accounting standards. The term is flexible and can refer to time intervals spanning over past-future (Devereux, 2016). Banking sectors play an important role in economic development by mobilizing savings into investment activities (Mordi, 2002) and in the creation of wealth by facilitating capital formation, enhancing economic growth and development, reducing information costs and offering risk management services (Dogarawa, 2011). Banking system reforms may be initiated by the government in developing, as well as developed countries, to remedy any deficiencies undermining the banking system (Yusuf & Sheidu, 2015). Banking Fraud Investigation Department report (CBK, 2014) reveals that there was rampant fraud of cash in commercial banks in Kenya in May 2014 alone thus affecting cash flow in these banks. This scenario precipitated this study to establish the actual situation on the ground. Cash flow problems for example, mismanagement, cash short falls, can lead to business failure. Even if the annual budget is balanced, with realistic revenue and expenditure estimates, in-year budget execution will not be smooth, since both the timing and seasonality of cash inflows and of expenditures can result in conditions of temporary cash surpluses or temporary cash shortfalls (Lienert, 2013). Cash shortage is a chronic challenge to most firms, and yet cash management is very crucial to the survival and growth of commercial banks (Attom, 2014). (Lobel, 2013) found out that improper accounts preparation and inadequate cash management procedures are some of the major challenges facing organizations leading to close up of the enterprises. (Schoubben and Van Hulle, 2008) documented that firms making profits and is unable to turn the debtors into liquid cash runs a risk of becoming insolvent despite having high sales. Banks need to safeguard gains made so far and build confidence since bankruptcy of Banks will be a manifestation of instability in the sector. Crisis such as the global financial markets faced since 2007 have grave implications for economic growth in developed and developing countries. Kenya's economy and financial system stability still face vulnerabilities with global risks. Therefore, the study sought to analyze the effect of Liquidity management on performance of commercial banks in Kisumu County, Kenya.

2. EFFECT OF LIQUIDITY MANAGEMENT ON PERFORMANCE OF COMMERCIAL BANKS IN KISUMU COUNTY, KENYA.

The competitive nature of the business environment requires firms to adjust their strategies and apply financial policies to survive and enable growth. According to Harash, Al-Timim, and Alsaadi, (2014), access to finance is essential to the survival and performance of any firm. Access to external finance is a key determinant of a firm's ability to develop, operate and expand (Lopez, 2007). No business can survive without enough funds for working capital, fixed assets investment, employment of skilled employees, development of markets and new products. An optimal capital structure is the best debt/equity ratio of a firm, which minimizes the cost of financing and maximizes the value of the firm. Liquidity refers to the ease with which an asset, or security, can be converted into ready cash without affecting its market price. Liquidity describes the degree to which an asset can be quickly bought or sold in the market at a price reflecting its intrinsic value. Cash is universally considered the most liquid asset because it can most quickly and easily be converted into other assets. Tangible assets, such as real estate, fine art, and collectibles, are all relatively illiquid. Other financial assets, ranging from equities to partnership units, fall at various places on the liquidity spectrum (Nwaezeaku 2008). Liquidity management is a cornerstone of every treasury and finance department. Those who overlook a firm's access to cash do so at their peril, as has been witnessed so many times in the past. In essence, liquidity management is the basic concept of the access to readily available cash in order to fund short-term investments, cover debts, and pay for goods and services. (Nwaezeaku, 2008) defined liquidity as the degree of convertibility to cash or the ease with which any asset can be converted to cash sold at a fair market price. (Don, 2009) Liquidity management is a concept that is receiving serious attention all over the world especially with the current financial situations and the state of the world economy. It is far from straightforward and brings with it many challenges that treasury and finance teams must constantly be aware of. While planning for the year ahead, managers are wary that firms cash inflows can be unpredictable (CBK, 2012). Risks such as counterparty insolvency risk play a part in assessing the business capabilities of third parties. Should a third party go bust, it may be a difficult and time-consuming process for the firm to extract payment. That may be particularly problematic if the insolvent party is operating in a different jurisdiction. Also for those firms operating across national boundaries, cross-currency transactions can be unpredictable, with fluctuations in exchange rates making it difficult to accurately ascertain exactly how much cash inflow or outflow will be.

The concern of business owners and managers all over the world is to devise a strategy of managing their day to day operations in order to meet their obligations as they fall due and increase profitability and shareholder's wealth. (CBK, 2012) documented that Liquidity management therefore involves the strategic supply or withdrawal from the market or circulation the amount of liquidity consistent with a desired level of short-term reserve money without distorting the profit making ability and operations of the bank. It relies on the daily assessment of the liquidity conditions in the banking system, so as to determine its liquidity needs and thus the volume of liquidity to allot or withdraw from the market. The liquidity needs of the banking system are usually defined by the sum of reserve requirements imposed on banks by a monetary authority. (Mwangi, 2014) found out that there is a significant negative relationship between liquidity risk management and financial performance of commercial banks. The results of the study show that a unit increase in liquid assets to total assets ratio decreases return on assets by 1%. A unit increase in liquid assets to total deposits ratio decreases return on assets by 2.2%. A unit increase in borrowings from banks decreases return on assets by 14.2%. Finally, the control variable which was asset quality shows that a unit increase in non-performing loans as a proportion of total loans would lead to a 12.4% decrease in return on assets. (Karani, 2014) found out that liquidity is one of the determinants of profitability of commercial banks. The relationship between Return on Assets (ROA), Cash and cash equivalents, Capital ratio and Deposit ratio is positive implying that an increase in liquidity will lead to an increase in profitability of commercial banks. The study further revealed that for the success of operations and survival, commercial banks should not compromise efficient and effective liquidity management. They are expected to maintain optimal liquidity level in order to satisfy their financial obligations to customers or depositors and maximize profits for the shareholders.

The optimal liquidity level is reached if the commercial banks religiously maintain the minimum liquidity requirement as stated by the Central Bank of Kenya. This attempt helps to reduce cases of bank distress. Both illiquidity and excess liquidity are financial Diseases that can easily erode the profit base of a bank as they affect bank's attempt to attain high profitability-level. The pursuit of high profit without consideration to the liquidity level can cause great illiquidity, which reduces the customers' patronage and loyalty. Therefore, any bank that has the aim of maximizing its profit level must

adopt effective liquidity management. Effective liquidity management also requires adequate liquidity level which will help commercial banks to estimate the proportion of depositor's funds that will be demanded at any period and arrange on how to meet the demand. Mogire (2003) studied working capital management among thirty public companies listed at the Nairobi Stock Exchange as at 31st December 2002. The objectives of the study were to determine the effects of profitability to companies, to investigate whether there is significant relationship between working capital management policy and the profitability of a company as measured by the return on equity and to establish if public companies in different sectors in Kenya follow different working capital management policies. Simple regression analysis was done to establish the relationship between working capital policy and return on equity. The results of the analysis showed that the commonly practiced working capital management policy among the public companies in Kenya is the aggressive approach policy and that there were no significant differences between the working capital management practices across the five sectors. Also there were no significant differences in return on equity among companies that practice different working capital management policies. The regression analysis also showed that the working capital management policy explained only fifty-three percent of the variation in return on equity. Mureithi (2003) carried out an empirical investigation into the determinants of corporate cash holding for the Kenyan quoted companies and revealed that there was a positive relationship between profitability and liquidity. Kiprono (2004) studied the relationship between cash flows and earnings performance measures for companies listed in the NSE (Nairobi Stock Exchange) and determine the relationship between risk and return on assets (ROA), return on equity (ROE) and return on net assets (RONA) against the cash flows of firms and concluded that there is a positive or direct association between cash flows from operating activities and all the return performance indicators. Njihia (2005) found out that liquid assets significantly determine the profit of the commercial banks especially in the period after political instability after the elections. The ratio of deposits held, loans and advances held by the commercial banks influenced the profitability. Kamoyo (2006) carried out an empirical study on the determinants of liquidity of commercial banks in Kenya.

Firm's performance largely depends on proper management of financial resources. Organizational performance is the measure of how efficient and effective an organization is- how well it achieves appropriate objectives (Stoner, et al, 2009). (Robbins and Coulter, 2013) affirmed that Organizational performance is the accumulated results of all the organization's work activities. (Cole, 2004) affirms that performance refers to how well an organization manages its resources effectively and efficiently to meet or achieve its goals. (Hornby, 2012) stated that performance is how well or badly something works. Performance of Commercial banks can be measured using investing surplus cash, return on assets and return on equity (Ainsworth and Deines, 2009). Waweru (2009) affirmed that financial performance of a firm involves increased profitability, higher efficiency and increased output (Teruel, 2008). Assessment of managerial performance poses practical challenges. The capital market only has the current profit statement and other public disclosures with which to assess performance. These are inadequate measures of managerial quality since they ignore "soft issues" and strategic off-the balance sheet items in such as human resource development, expansion of production capacity and Research and Development whose return can only be realized in subsequent accounting periods (Star, 2008). The nature of a given financial performance indicator may be fundamental, as there is some disagreement regarding the extent to which any board or executive decisions might impact accounting versus market-based measures of financial performance. Besides, financial accounting returns are difficult to interpret especially in the case of multi- industry participation by firms. It is notable that financial accounting measures do not normally account for shareholder investment risk. Fearing the loss of their jobs, managers might put too much emphasis on how their decisions influence short-term profits and other public disclosures. Managers thus have a tendency to act myopically (Mathuva, 2009). The emphasis on short-term performance is a common practice among executives. The danger is that current profits are over-valued by the market relative to strategic decisions that are likely to generate future profits. The danger is that current profits are over-valued by the market relative to strategic decisions that are likely to generate future profits. Hence, management will use a very high discount rate when making investment decisions. Good projects that reap their gains in the distant future will be ignored and bad projects with a short payback period accepted (Michalski, 2009).

The typical financial indicators that have been commonly used are Return on Assets (ROA) and Return on Equity (ROE) (Cohen, 2009; Meredith, 2010; McMahan, 2011). The typical financial indicators that have been commonly used are Return on Assets (ROA) and Return on Equity (ROE) (Cohen, 2009; Meredith, 2010; McMahan, 2011). Over-reliance on financial indicators to judge overall Commercial banks performance is often misleading especially if the Commercial bank in question has a lot of intangible assets component in its operations including human resources, Research and

Development and other non-balance sheet assets. Hence, the need to pay attention to non-financial indicators of performance, or at least one that combines aspects of both, for a more comprehensive appraisal of firm performance cannot be overemphasized (Emory, 2009). Market-based returns have a number of advantages. They do reflect risk adjusted performance; they are not adversely affected by multi- industry or multinational issue may, however, be that market- based performance indicators are often subject to forces beyond management control (Falope, 2009). As there appears to be no consensus regarding the efficacy of reliance on one set of indicators, a combination of financial and market –based indicators is recommended in order to capture the issues that are under the control of management as well as those that are market driven. (Myers, 1984) stated that companies prioritize their sources of financing (from internal financing to equity) according to the law of least effort, or of least resistance, preferring to raise equity as the last financing means. Hence, internal financing is used first; when that is depleted, then debt is issued; and when it is no longer sensible to issue any more debt, equity is issued. (Pandey, 2013) affirmed that there is a close relationship between cash and money market securities or other short term investment alternatives. Investment in these alternatives should be properly managed. Excess cash should normally be invested in those alternatives that can be conveniently and promptly converted into cash. Cash in excess of the requirement of operating cash balance may be held for two reasons. First, the working capital requirement of the firm fluctuates because of the elements of seasonality and business cycles. The excess cash may build up during slack seasons but it would be needed when the demand picks up.

According to Horne and Wachowitz, (2009)., the choice between the short term borrowings and liquid assets holding will depend upon the firm's policy regarding the mix of short term financing. The excess amount of cash held by the firm to meet variable cash requirements and future contingencies should be regarded as near moneys. A number of marketable securities may be available in the market. The financial manager must decide about the portfolio of marketable securities in which the firm's surplus cash should be invested. Alti (2003) found out that investment is sensitive to cash flow, even after controlling for its link to profitability by conditioning market. Furthermore, the sensitivity is substantially higher for young, small firms with high growth rates and low dividend payout ratios. The uncertainty these firms face about their growth prospects amplifies the investment-cash flow sensitivity in that, the uncertainty is resolved in time as cash flow realizations provide new information about investment opportunities. This makes capital expenditure highly sensitive to free cash flow surprises. Bo Becker (2006) established that in frictionless financial markets, investment does not depend on internal cash flows and that firms invest more on average when they have higher cash flow. (Hovakimian and Hovakimian, 2005) concluded that there is a positive relationship between internal funds and investment decisions due to the liquidity constraints faced by firms as a result of the gap between the cost of external financing and internal financing. Firms adopt the pecking order theory by utilizing retained earnings since no floatation cost is involved. When it is over, they use debt to control ownership and finally external equity is employed to spread risks among various stakeholders.

There are various determinants of investment ratio identified in the prior literature. For instance, Pearce (2015) suggests that return on investment is considered as the most authentic one and it is calculated by subtracting the total cost from total revenue and dividing it with the total cost and multiplying the output with 100 to achieve a percentage. Return on assets is a useful indicator of how profitable a company is relative to its total assets. The ROA is calculated by dividing a firm's annual earnings by its total assets (Pandey, 2009). The ROA is calculated by dividing a firm's annual earnings by its total assets (Pandey, 2008). This ratio is an indicator of what the company can do with what it has got, i.e., how much profit it can achieve using one unit of assets that they control. It is an indication of how effective management is in utilizing the resources that it controls to make profits (Ross, 2008). The higher the ratio the higher the profits generated per unit of assets. Return on Assets has proved to be a very useful number for comparing competing companies in the same industry. The number will vary widely across different industries. For example, capital-intensive industries (like railroads and steel structures) will yield a low return on assets, since they have to own such expensive assets to do business. Labor-intensive companies (like software, job placement firms) will have a high ROA since their asset requirement is minimal (Shah, 2009). ROA ratio has been widely used in researches on corporate profitability and found to be extremely robust. Other researchers who have used ROA include Sanger (2009), Singh (2008), Nyakundi (2008), English (2010), Ondiege (2008), and Ngaba (2008), all of whom were investigating various aspects of financial management, and their impact on financial performance. Return on Assets (ROA) is very relevant to the current study since it enables us to evaluate the result of managerial decisions on the use of shareholder assets which have been entrusted to them for stewardship and value creation.

Return on investment is net income divided by total assets multiplied by one hundred (Horngren and Foster, 2013). Sinha and Gupta (2011) indicate that cash management specifically affect particular financial parameters such as economies of scale and scope, EBIT, return on investment, profit and interest ratios. The term investment may refer to total assets or net assets. Net assets equal net fixed assets plus current assets minus current liabilities excluding loans. The funds employed in net assets are known as capital employed. ROI is profit after taxes divided by total assets multiplied by one hundred (Pandey, 2013). (Schall and Haley, 2008) affirmed that return on investment is net income divided by total assets multiplied by one hundred. The return on equity is net profit after taxes divided by shareholders' equity which is given by net worth. Ross and Westfield, (2010) return on equity is residual income divided by equity multiplied by one hundred. Return on Equity refers to the earnings generated by shareholders' equity over a period of one year. ROE stands as a critical weapon in the investor's arsenal if it is properly understood for what it is. Shareholders equity is an accounting convention that represents the assets that have actually been generated by the business (i.e. total assets less liabilities) (Meredith, 2010).

A business that creates a lot of shareholder equity is a business that has sound investment, as the original investors in the business will be able to be repaid with the proceeds that come from the business operations. Businesses that generate high returns relative to their shareholder's equity are those that pay their shareholders off handsomely, creating substantial assets. These businesses are more than likely to be self-funding companies that require no additional debt or equity investments. One of the quickest ways to gauge whether a company is an asset creator or cash consumer is to look at the return on equity that it generates. By relating the earnings generated to the shareholder's equity, an investor can quickly see how much cash is created from the existing assets. (Mona, 2012) utilized ROE to study the relationship between working capital management policies and firm's profitability.

On the overall, the literature reviewed is able to guide researchers of all ages to navigate through finance studies at any academic and profession level. The authors of this literature are consistent, systematic and concise. The literature is adequate and satisfactory to arrive at desired findings and conclusions in the study. Presentation of this literature in different sections provides enough ground to a researcher to carry out his study with limited hurdles.

Several studies have been done on cash flow and performance of firms. Past research on a similar study with a population of 43 banks covering the whole country of Kenya had 79% response rate. The major limitation was the cash flow management of the commercial banks. Many gaps been identified by various scholars. Nyakundi (2011) carried out a survey of cash flow management policies among public sector in Kenya and established that in most adopted aggressive cash flow policy and hedging cash policy, management policies affect performance in public sector. Weda (2015) carried out a study on influence of working capital management practices on financial performance of small and medium manufacturing enterprises in Nairobi county, Kenya and found out that about 51.3 per cent often prepare cash budgets and preparing and reviewing cash budgets are frequently based on monthly periods, however; there is still unexplored area in the cash flow management literature. (Kethiu, 2010) did a study on relationship between cash flow management and profitability of listed companies in the Nairobi Stock Exchange and established that cash flow management greatly affects their profitability with those having good practices performing better than others while (Mbeki, 2009) did a survey of cash flow policies among finance institutions in Nairobi and established that cash policies positively affect the performance of financial institutions. (Guda, 2013) conducted a study on the relationship between cash flow and profitability of small and medium enterprises in Nairobi County and established that there is evidence of significant net profit and cash flow from operating activities. This study is focused examining the determinants of cash flow management on performance of commercial banks in Kisumu County, Kenya.

3. METHOD

This study adopted a descriptive research design with a target population which comprised of 50 respondents from management and a supervisory cadre within commercial banks in Kisumu County, Kenya. Census was adopted since the target population was small. Data collection instrument was questionnaire. The questionnaire was structured questions. Piloting was done to test the reliability and validity of the data collection instrument. The data was reduced, organized, coded, edited, classified using a table and analyzed to bring out the meaning under each of the factors. Pearson correlation analysis was used to test the relationship between variables in the study hypotheses. ANOVA and multiple linear regression analysis was adopted computed to determine the statistical relationship between the independent variable and the dependent.

4. DISCUSSION

The study sought to examine the effect of Liquidity management on performance of commercial banks in Kisumu County, Kenya. The findings are presented in a five point Likerts scale where SA=strongly agree, A=agree, N=neutral, D=disagree, SD=strongly disagree and T=total.

From table 4.1 below, the respondents were asked whether cash is universally considered the most liquid asset because it can most quickly and easily be converted into other assets. The distribution of findings showed that 58.2 percent of the respondents strongly agreed, 30 percent of them agreed, 10.9 percent of the respondents were neutral while 0.9 percent disagreed. None of the respondents strongly disagreed to the statement. These findings implied that majority of the respondents agreed that cash is universally considered the most liquid asset because it can most quickly and easily be converted into other assets.

The respondents were also asked whether commercial banks profitability is influenced by current ratios, quick ratios and cash ratios. The distribution of the responses indicated that 54.5 percent strongly agreed to the statement, 38.2 percent of them agreed and 6.4 percent of them were neutral while 0.9 percent of them disagreed. None of the respondents strongly disagreed to the statement. These findings implied that majority of the respondents agreed that commercial banks profitability is influenced by current ratios, quick ratios and cash ratios.

The respondents were also asked whether liquidity management is the cornerstone of every treasury and finance department for accessing readily available cash in order to fund short-term investments, cover debts, and pay for goods and services. The distribution of the responses indicated that 45.5 percent strongly agreed to the statement, 47.3 percent of them agreed, 5.5 percent of them were neutral while 0.9 percent of them disagreed and strongly disagreed to the statement respectively. These findings implied that majority of the respondents agreed that liquidity management is the cornerstone of every treasury and finance department for accessing readily available cash in order to fund short-term investments, cover debts, and pay for goods and services. The respondents were further asked whether cash and cash equivalents, capital ratio and deposit ratio positive increase in liquidity leads to an increase in profitability of commercial banks. The distribution of the responses indicated that 58.2 percent strongly agreed to the statement, 30.9 percent of them agreed while 10.9 percent of them were neutral. None of the respondents disagreed or strongly disagreed to the statement. These findings implied that majority of the respondents agreed that cash and cash equivalents, capital ratio and deposit ratio positive increase in liquidity leads to an increase in profitability of commercial banks.

Further, the respondents were further asked whether effective liquidity management also requires adequate liquidity level which will help commercial banks to estimate the proportion of depositor's funds that will be demanded at any period and arrange on how to meet the demand. The distribution of the responses indicated that 52.7 percent strongly agreed to the statement, 34.5 percent of them agreed while 12.7 percent of them were neutral. None of the respondents disagreed or strongly disagreed to the statement. These findings implied that majority of the respondents agreed that effective liquidity management also requires adequate liquidity level which will help commercial banks to estimate the proportion of depositor's funds that will be demanded at any period and arrange on how to meet the demand. Finally, the respondents were asked whether liquidity management enhances commercial banks performance. The distribution of the responses indicated that 42.9 percent strongly agreed to the statement, 51.6 percent of them agreed while 5.5 percent of them were neutral. None of the respondents disagreed or strongly disagreed to the statement. These findings implied that majority of the respondents agreed that liquidity management enhances commercial banks performance.

Table 4.1: Effect of Liquidity management on performance of commercial banks in Kisumu County, Kenya

Statements		SA	A	N	D	SD
Cash is universally considered the most liquid asset because it can most quickly and easily be converted into other assets.	%	58.2	30.0	10.9	0.9	0
Commercial banks profitability is influenced by current ratios, quick ratios and cash ratios	%	54.5	38.2	6.4	0.9	0
Liquidity management is the cornerstone of every treasury and finance department for accessing readily available cash in order to fund short-term investments, cover debts, and pay for goods and services	%	45.5	47.3	5.5	0.9	0.9

Cash and cash equivalents, capital ratio and deposit ratio positive increase in liquidity leads to an increase in profitability of commercial banks	%	58.2	30.9	10.9	0	0
Effective liquidity management also requires adequate liquidity level which will help commercial banks to estimate the proportion of depositor's funds that will be demanded at any period and arrange on how to meet the demand	%	52.7	34.5	12.7	0	0
Liquidity management enhances commercial banks performance	%	42.9	51.6	5.5	0	

4.2 Inferential Statistics

4.2.1 Pearson Correlation

The study sought to establish the strength of the relationship between independent and dependent variables of the study. Pearson correlation coefficient was computed at 95 percent confidence interval (error margin of 0.05). Table 4.2 illustrates the findings of the study.

Table 4.2: Correlation Matrix

		Performance of commercial banks
Liquidity management	Pearson Correlation	.901**
	Sig. (2-tailed)	.000
	N	47

As shown on Table 4.2 above, the p-value for liquidity management was found to be 0.000 which is less than the significant level of 0.05, ($p < 0.05$). The result indicated that Pearson Correlation coefficient (r-value) of 0.901, which represented an average, positive relationship between liquidity management on performance of commercial banks in Kisumu County, Kenya.

4.2.2 Multiple Linear Regression

Multiple linear regressions were computed at 95 percent confidence interval (0.05 margin error) to show the multiple linear relationships between the independent and dependent variables of the study.

4.2.2.1 Coefficient of Determination (R^2)

Table 4.3 below shows that the coefficient of correlation (R) is positive 0.541. This means that there is a positive correlation between the effect of liquidity management as a determinants of cash management and performance of commercial banks in Kisumu County, Kenya. The coefficient of determination (R Square) indicates that 29.7% of performance of commercial banks in Kisumu County, Kenya is influenced by liquidity management as a determinants of cash management. The adjusted R^2 however, indicates that 24.3% of performance of commercial banks in Kisumu County, Kenya is influenced by the effect of liquidity management as a determinants of cash management leaving 75.7% to be influenced by other factors that were not captured in this study.

Table 4.3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.541 ^a	.297	.243	9.20118

a. Predictors: (Constant), liquidity management,

4.2.2.2 Analysis of Variance

Table 4.4 shows the Analysis of Variance (ANOVA). The p-value is 0.000 which is < 0.05 indicates that the model is statistically significant in predicting how liquidity management as a determinant of cash management affects performance of commercial banks in Kisumu County, Kenya. The results also indicate that the independent variables are predictors of the dependent variable.

Table 4.4: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	611.766	1	237.311	46.172	.000 ^b
	Residual	1476.232	46	15.964		
	Total	2087.000	47			

4.2.2.3 Regression Coefficients

From the Coefficients table (Table 4.5) the regression model can be derived as follows:

$$Y = 52.711 + 0.494X_1 + 0.732X_2 + 1.028X_3$$

The results in table 4.12 indicate that all the independent variables have a significant positive effect on performance of commercial banks in Kisumu County, Kenya. The influential variable is liquidity management which had a coefficient of 0.494 (p-value =0.000). According to this model when all the independent variables values are zero, performance of commercial banks in Kisumu County, Kenya will have a score of 52.711.

Table 4.5: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	52.711	2.638		66.210	.000
Liquidity management	.494	.150	.354	2.313	.000

4.2.3 Hypothesis Testing

Ho₁: Liquidity management does not have a significant effect on performance of commercial banks in Kisumu County, Kenya.

From Table 4.5 above, liquidity management ($\beta = 0.494$) was found to be positively related performance of commercial banks in Kisumu County, Kenya. From t-test analysis, the t -value was found to be 2.313 and the ρ -value 0.000. Statistically, this null hypothesis was rejected because $\rho < 0.05$. Thus, the study accepted the alternative hypothesis and it concluded that liquidity affects performance of commercial banks in Kisumu County, Kenya.

5. CONCLUSION AND RECOMMENDATION

The study sought to examine the effect of Liquidity management a determinant of cash flow management on performance of commercial banks in Kisumu County, Kenya. In conclusion basing on the findings, liquidity management ($\beta = 0.494$) was found to be positively related performance of commercial banks in Kisumu County, Kenya. From t-test analysis, the t -value was found to be 2.313 and the ρ -value 0.000. Statistically, this null hypothesis was rejected because $\rho < 0.05$. Thus, the study accepted the alternative hypothesis and it concluded that liquidity affects performance of commercial banks in Kisumu County, Kenya.

The study recommends that the management of commercial banks should train their employees to be more efficient and effective on liquidity management, receivables management and payable management to reduce some of the problems and enhance high performance. There should have frequent audits to enable cash surplus investment practices and cash-control practices. The management of commercial banks should ensure that adequate cash is available to pay for expenditures when they are due, to borrow only when needed and to minimize government borrowing costs, to minimize returns on idle cash and to manage risks, by investing temporary surpluses productively, against adequate collateral. The treasury and finance department should make access of readily available cash in order to fund short-term investments, cover debts, and pay for goods and services and that cash and cash equivalents, capital ratio and deposit ratio positive to increase in liquidity leading to an increase in profitability of commercial banks. They should develop funds for working capital, fixed assets investment, employment of skilled employees, development of markets and new products in order to survive in harsh conditions of financial crisis. They should also maintain the minimum liquidity requirement as stated by the Central Bank of Kenya as both illiquidity and excess liquidity are financial diseases that can easily erode the profit base of a bank as they affect bank's attempt to attain high profitability-level.

REFERENCES

- [1] Abdifatah, L.M. (2010). The impact of Cash Management on Cash holding: A *Quantitative Study of Swedish Manufacturing SMEs*, Mid Sweden University, and Faculty of Human Sciences and Department of Social Sciences.
- [2] Abdou, H., Agbeyo, B., Jones, K., & Sorour, K. (2016). The impact of M&A on the Nigerian financial market: A pre-post analysis. *Investment Management and Financial Innovation*, 13(1), 138-150. [https://doi.org/10.21511/imfi.13\(1-1\).2016.01](https://doi.org/10.21511/imfi.13(1-1).2016.01)
- [3] Abdul-Rahamon, O.A. & Adejare, A.T. (2014). The Analysis of the impact of Accounting Records keeping on the Performance of the Small Scale Enterprises. *International Journal of Academic Research in Business and Social Sciences*, 4(1), 1-17.
- [4] Abioro, M. (2013). The impact of cash management on the performance of Manufacturing companies in Nigeria. *Uncertain Supply Chain Management*, (1), 177–192.
- [5] Ademola, G. O., Samuel O. J. & Ifedolapo, O. (2012). The Roles of Record Keeping In The Survival and Growth of Small Scale Enterprises in Ijumu Local Government Area of Kogi State. *Global Journal of Management and Business Research*, 12(13), 54-66
- [6] Ainsworth, P. & Deines, D. (2009). *Introduction to Accounting: An Integrated Approach*. 5th ed. New York: McGraw-Hill.
- [7] Aikaeli, J., Mugizi, F. & Ndanshau, A. (2011). The Determinants of Interest Rate Spreads in Developing Countries: Evidence on Tanzania, 1991-, (*Working Paper o. 02/11.2009*). Dar es Salaam, University of Dar es Salaam, Department of Economics.
- [8] Akpan, M. N. U., Aik, N. C., Wanke, P. F., & Chau, W. H. (2018). Exploring the long-term trade-off between efficiency and value creation in horizontal M&As: Evidence from Nigeria. *African Journal of Economic and Management Studies*, 9(2), 130-147. <https://doi.org/10.1108/AJEMS-06-2017-0139>
- [9] Akunga, G. (2013). *The Regional programme of Enterprise Development Survey, 993[16]95*: Structure and performance of Manufacturing in Kenya. London: Palgrave.
- [10] Auerbach, A. J., & Devereux, M. P. (2013). Consumption and cash-flow taxes in an international setting (No. w19579). STICERD - Public Economics Programme *Discussion Papers* 03, Suntory and Toyota International Centres for Economics and Related Disciplines, LSE. National Bureau of Economic Research.
- [11] Auma, E. (2014). Factors Affecting the Performance of Construction Projects in Kenya: A Survey of LowRise Buildings in Nairobi Central Business District. *The International Journal of Business & Management*, 2(12), 115.
- [12] Atieno, R. (2009). Linkages, access to finance and the performance of small-scale Enterprises in Kenya. *Journal of Accounting and Business Research*, 3(1), 33-48.
- [13] Attom, E.B. (2014). Cash Management Practices by Micro and Small-Scale Enterprises At Kasoa in the Central Region of Ghana. *Asian Journal of Business and Management Sciences*, 3(2), 1-12.
- [14] Atrill, P. (2008). *Financial Management for Decision Makers* (4th ed). Sydney: Longman Professional.
- [15] Bastos, R., & Pindado, J. (2012), Trade credit during a financial crisis: A panel data analysis, *Journal of Business Research* (2012), doi: 10.1016/j.jbusres.2012.03.015
- [16] Barrow, C. (2010). *Financial Management for the Small Business: The Daily Telegraph guide*, (2nd ed), London: Kogan Page,
- [17] Baveld, M. B. (2012), Impact of Working Capital Management on the Profitability of Public Listed Firms in The Netherlands During the Financial Crisis. <http://purl.utwente.nl/essays/61524>
- [18] Beaver, W. (2009). Financial reporting, supplemental disclosures, and bank share prices. *Journal of Accounting Research*, 27(2), 157-178.

- [19] Benedikt, Simon & Daniel. (2007). Customer satisfaction, market share and profitability: findings from Chastain Christopherson (2008) From Risk Taker Manager: *Ten Principles for Establishing a comprehensive Risk Management System for Banks*.
- [20] Beardshaw, J., D. Brewster, P. Cormack and A. Ross. (2001). *Economics: A Student's Guide*. 5th ed. New York: Prentice Hill.
- [21] Bodgam R.& S. Bilken. (1992). *Qualitative Research for Education*. Boston: Allyn and Bacon.
- [22] Blocks, S. & Hirt, G. (2009). *Foundations of Financial Management*. London: Irwin
- [23] Brealey, Myers, Marcus. (2009). *Fundamentals of Corporate Finance*. 6th ed. New York: McGraw Hill.
- [24] Brigham, E. F. & Ehrardt, M. C. (2005). *Financial Management: Theory and Practice*. 10th Ed. International Student Edition, San Diego: Harcourt Publishers.
- [25] Brigham, E. F. & Daves, P. R. (2007). *Intermediate Financial Management*. London:Library of Congress.
- [26] Brigham, E.F. & Houston, J.F. (2012). *Fundamentals of Financial Management*. New Delhi: Cengage Learning India Private Ltd.
- [27] Chamberlin, G. & Linda, Y. (2011). *Macroeconomics*. London: Library of Congress.
- [28] Chepkwony, C. C. (2014). The relationship between free cash flows and stock returns of firms listed at the Nairobi securities exchange (Doctoral dissertation, University of Nairobi).
- [29] Cooley, P. & Pullen, R. (2009). Small business cash management practices, *American Journal of Small Business*, 4(2), 1 – 11.
- [30] Cooper, R. & Pamela, S. (2010). *Business Research Methods*. 9th ed. New York: McGraw-Hill.
- [31] Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative and Mixed Methods and Approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- [32] Dogarawa, A. B. (2011). Financial inclusion in Nigeria and the prospects and challenges of Islamic microfinance banks. Retrieved from <https://ssrn.com/abstract=1956653>
- [33] Donnelly. (2015). *Illicit Financial Flows Costing Africa Billions*. Addis Ababa: Africa Development Bank.
- [34] Harash, E., Al-Timim, S., & Alsaadi, J., (2014), Effects of Financing on Performance of Small and Medium Enterprises, in Iraq. *IPASJ International Journal of Management (IJM)*, <http://www.ipsaj.org/IJM.htm>
- [35] Fukuda, S., Kasuya, M., & Akashi, K. (2006), The role of trade credit for small firms: An implication from Japan's banking crisis, *CIRJE Discussion Papers Series F-440*. Tokyo, Japan: The University of Tokyo
- [36] Fridson, M. S., & Alvarez, F. (2011). *Financial statement analysis: A practitioner's guide* (Vol. 597). John Wiley & Sons. <https://doi.org/10.1002/9781119201489>
- [37] Ghosh, N. B. (1999). *Scientific and Research Method*. 4th ed. New Delhi: Sterling Publisher.
- [38] Gill, A., Biger, N. & Mathur, N. (2010), The Relationship Between Working Capital Management and Profitability: Evidence from *The United States, Business and Economics Journal, Volume 2010: BEJ-10*
- [39] Gitman, L. & Chad, Z. (2013). *Principles of Managerial Finance*. London: Pearson Educational Publishers.
- [40] Gitman, L.J. (2008). *Principles of Managerial Finance*. 11th ed. New Delhi: Pearson Education Publishers.
- [41] Glautier, et al. (2011). *Financial Accounting*. New York: McGraw-Hill.
- [42] Grant, S. & Stanlake, G. (2011). *Introductory Economics*. 7th ed. London: Pearson Education Publishers.
- [43] Griffin, W. R. (2002). *Management*. 7th ed. Boston: Houghton Mifflin Company.
- [44] Hardwick, Philip, Khan, Bahadur, Langmead and John. (1999). *An Introduction to Modern Economics*. 5th ed. New York: McGraw-Hill.

- [45] Haven, J. (2008). *The Financial Crisis of 2008: Year in Review 2008*. Washington DC. Britannica Publishers
- [46] Hillier, Ross, Westerfield, Jaffe and Jordan. (2013). *Corporate Finance*. 2nd ed. London: McGraw-Hill.
- [47] Hornby, A. S. (2012). *Oxford Advanced Learner's Dictionary*. 8th ed. London: Oxford University Press.
- [48] Holt, Rinehart, & Winston. (1999). *Economics*. New York: Harcourt Brace Company.
- [49] Horngren, C. T. and Foster, G. (2013) *Cost Accounting: A Managerial Emphasis*. 11th ed. New Delhi: Prentice Hall of India Private Limited.
- [50] Horne, J. & James, C. (2009) *Financial Management and Policy*. 12th ed. London: Prentice- Hall.
- [51] Horne, V.J. & Wachowicz, J.M. (2009). *Fundamentals of Financial Management*. 13th ed. New Delhi: Asoke Publishers.
- [52] Joshi, R.N. (2011). *Cash Management: Perspectives, Principles and Practices*. New Delhi: New Age International Publishers.
- [53] Kakoza, T. (199). *An Introduction to Research Methodology*. Kampala: The National Adult Education Association.
- [54] Kapoor, L., R. Dlabay and J.H.Robert . (2001). *Personal Finance*. New York: McGraw- Hill.
- [55] Kithinji, M. & Waweru, M. (2007). Merger Restructuring and Financial Performance of Commercial Banks in Kenya. *Journal of Economics, Management and Financial Markets*, 2, (4).
- [56] Koech, P. (2012). Relationship between liquidity and return of stock at the Nairobi securities exchange (Doctoral dissertation, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI)
- [57] Kouser, R., & Saba, I. (2011). Effects of business combination on financial performance: Evidence from Pakistan's banking sector. *Australian Journal of Business and Management Research*, 1(8), 54-64.
- [58] Kothari, R, C. (2004). *Research Methodology: Methods and Techniques*. 2nd ed, New Delhi; New Age International Publishers.
- [59] Lawrence Gitman & Chad J. Zutter (2019). *Principles of Managerial Finance*, 14th edition, Addison-Wesley Publishing, ISBN 978-0133507690.
- [60] Lazaridis, I. & Tryfonidis, D. (2006). "Relationship between Working Capital Management and Profitability of Listed Companies in the Athens Stock Exchange", *Journal of Financial Management and Analysis*, 19(1), 26-35.
- [61] Lerner, J.J. & Gokarn, R.Y. (2007). *Bookkeeping and Accounting*. 4th ed. New York: McGraw-Hill.
- [62] Lienert, I. (2009). Modernizing Cash Management. Fiscal Affairs. Washington D.C: World Bank; *International Monetary Fund*.
- [63] Lipsey, R. & Chrystal, A. (2014). *Economics*. 12th ed. New York: Oxford University Press.
- [64] Love, I., Preve, A. P., & Sarria-Allende, V. (2007), Trade credit and bank credit: Evidence from recent financial crises, *Journal of Financial Economics*, 83, 453–469
- [65] Lumbay, S. & Jones, C. (2011). *Corporate Finance*. Theory and Practice, London: Library of Congress.
- [66] Manasseh, P. (2010). *A Text Book of Financial Management*. Nairobi: Kijabe Printing Press.
- [67] Mathuva, D. (2010), The Influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms, *Research Journal of Business Management*, 4, 1-11.
- [68] Mesia, G. W. & Balken, B. D. (2002). *Management*. Boston: McGraw-Hill.
- [69] McLaney, E. (2011). *Business Finance; Theory and Practice*. 9th ed. London Prentice Hall.
- [70] Moyer, R.C, Maguigan, J.R. & Kretlow, W.J. (2001). *Contemporary Financial Management*. Ohio: South Western Publishing.

- [71] Mugenda, G.& Mugenda, O. (2011). *Research Methods: Quantitative and Qualitative Approach*. Nairobi: Acts Press.
- [72] Muhammad, H., Rehman, A. U., & Waqas, M. (2016). The relationship between working capital management and profitability: A case study of tobacco industry of Pakistan. *The Journal of Asian Finance, Economics and Business*, 3(2), 13-20. <https://doi.org/10.13106/jafeb.2016.vol3.no2.13>.
- [73] Mungai, A. (2014). The impact of cash management on profitability and sustainability Of small retail businesses in the Tongaat area, KwaZulu-Natal. *Published Master Of Technology Report, Durban University of Technology, South Africa*.
- [74] Muranaga, J. & Ohsawa, M. (2002). Measurement of liquidity risk in the context of Market risk calculation, *working paper, Institute for Monetary and Economic Studies, Bank of Japan, Tokyo*.
- [75] Ngugi, R. (1999). "An Empirical Analysis of Interest Rate Spread in Kenya." *AERC Research Paper. Nairobi, AERC*.
- [76] Nguyen, K.M. (2001). Financial management and profitability of small and medium Enterprises. *DBA thesis, Southern Cross University, Lismore, NSW*.
- [77] Nzomo, D.N. (2002). *Basic Accounting: Fundamentals, Principles, and Procedures*. Nairobi: University of Nairobi Press.
- [78] Pandey, I. M. (2013). *Financial Management*. 11th ed. New Delhi: Vikas Publishing House Pvt Ltd.
- [79] Pearce, J. M. (2015). Return on investment for open source scientific hardware development. *Science and Public Policy*, 43(2), 192-195. <https://doi.org/10.1093/scipol/scv034>
- [80] Rahaman, A.S. (2010). Public Sector Accounting and Financial Management in a Developing Country Organizational Context: *A Three-Dimensional View: Armidale, University of New England, 1; 121-153*.
- [81] Ravi, P. & Sharma, P. (2012). The impact of credit risk management on financial Performance of commercial banks in Nepal, *International Journal of Arts and Commerce*, University of New England Australia
- [82] Ross, S. A. (1999) *Corporate Finance*. New York: McGraw-Hill.
- [83] Ross, S. A., Westerfield, W. W. and J. Jaffrey. (2008). *Corporate Finance*. 9th ed. New York: McGraw- Hill.
- [84] Ross, S. A. & Randolph, W. W. (2010). *Fundamentals of Corporate Finance*. 9th ed. Boston: McGraw- Hill.
- [85] Saleem, N. A. (2013). *Cost Accounting Simplified*. Nairobi: Saleem Publishers.
- [86] Saleem, N. A. (2013). *Economics Simplified*. Nairobi: Saleem Publishers.
- [87] Sharma, A.K. and Kumar, S. (2011), Effect of Working Capital Management on Firm Profitability: Empirical Evidence from India, *Global Business Review*, 12(1), 159 – 173.
- [88] Waweru, K. (2009). Determining cash balance management practices: *The Journal of Applied Finance*, 15(8), 10-20.
- [89] Williams, et al. (2008). *Financial and Managerial Accounting*, McGraw-Hill Irwin- New York.
- [90] Williams, et al. (1998). *Financial and Managerial Accounting: The Basis for Decisions*. 12th
- [91] Wood, F. & Allan, S. (2012). *Business Accounting*. 12th ed. London: Pearson Publishing House.
- [92] Yusuf, H., & Sheidu, A. D. (2015). Mergers and acquisitions in the banking sector and implications for return on equity (ROE): Evidence from Nigeria. *International Journal of Business and Social Science*, 6(9), 184-191.
- [93] Zikmund, G., Babin, J., Carr, J. & Griffin, M. (2010). *Business Research Methods* 8th Edition, South-Western, Cengage Learning.