EFFECT OF LIQUIDITY MANAGEMENT ON FINANCIAL PERFORMANCE OF NON-FINANCIAL FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES, UNIVERSITY OF NAIROBI
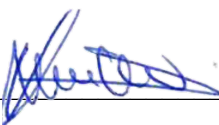
OCTOBER, 2021

DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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D63/28180/2019

This research project has been submitted for examination with my approval as the University Supervisor.

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ACKNOWLEDGEMENT

DEDICATION

This study is in honor of my loved ones, my mother, Magdalene Koki, and father, Maurice Achach, who have provided guidance and support, cheering me on as I endure life's hardships, my sister Sylvia Achach who serves as an inspiration to live life full of zeal and hard work. I also dedicate this study to my late sister Maureen Mwikali who wanted to pursue a Master's course in this institution, but whose life was unfortunately cut short.

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LIST OF ABBREVIATIONS

ANOVA   Analysis of Variance

CBK   Central Bank of Kenya

CMA   Capital Markets Authority

FP   Financial Performance

GDP   Gross Domestic Product

MM   Miller and Modigliani

NSE   Nairobi Security Exchange

ROA   Return on Assets

ROE   Return on Equity

ROS   Return on Sales

SME   Small and Medium Enterprises

SPSS   Statistical Package for Social Sciences

VIF   Variance Inflation Factors

ABSTRACT

When firms experience difficulties with liquidity management, they may transfer their expenses to creditors this is very risky for firms and could bring about bad credit terms. In the long run greatly affects effectiveness. The importance of liquidity management has been well embraced by institutions. Absence of regulations makes companies to hold liquid assets to a point that they maximize the profitability together with financial performance. The goal of the study was to see how liquidity management affected the performance of NSE-listed non-financial companies. The study's population included all 42 NSE-listed non-financial companies. Liquidity management, defined by the current ratio was used as a predictor variable in this study. Control variables were financial leverage, defined as the total debt to total assets ratio in a particular year, total assets natural log measuring company size, and management efficiency measured by the ratio of total revenue to total assets per year. Return on assets served as the response variable for financial performance. Secondary data was collected on a yearly basis for five years (January 2016 to December 2020). The research variables were analyzed using a descriptive design. Descriptive, correlation and regression analysis was conducted. The conclusions yielded a 0.292 R-square value, indicating that variations in the chosen independent variables account for 29.2 percent of changes in financial performance amongst non-financial firms, whereas other factors accounting for 70.8% of variance in financial performance amongst NSE listed non-financial firms. Independent variables had a good relationship with company performance (R=0.541) in this study. The F statistic was significant at 5% with $p<0.05$, according to the ANOVA results. This demonstrated that the overall model was effective in establishing the variables' relationships. Liquidity management had a positive as well as statistically significant impact on the performance of the NSE listed non-financial companies. Financial leverage had a negative as well as statistically significant impact on financial performance. In this research, the size of the firm had no statistical significance. This suggestion is that NSE-listed non-financial companies should focus on achieving the best degree of liquidity positions and financial leverage, as the two factors has a substantial effect on their financial performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Financial Performance (FP) is expected to be significantly affected by liquidity management and for this reason; companies have opted for complex and rigorous programs to cope with their affairs (Arif, 2012). Liquidity management can impact the financial performance of a firm and the economy at large. Liquidity position is therefore a paramount aspect of firm's performance since it impacts significantly on FP and the going concern of an organization. The failure of firms' to attend to the short term demands of their customers in timely manner leads to poor financial performance (Levi, Russell & Langemeier, 2013).

The major theories guiding effective liquidity management include liquidity preference theory, trade-off theory, and operational cycle theory. The theories emphasize the importance of having an optimal liquidity level. The liquidity preference theory by Keynes (1936) is the anchor theory and it states that an increase in money supply at low rate of interest will result in a rise in cash balances and discourage savings and investment. Trade off theory by Myers (1984) holds that firms maintain target liquidity levels by lowering the risk of shortage or excess of liquidity to enhance performance. The operating cycle theory by Weston and Brigham (1979) is relevant to this research since it proposes that proper liquidity management will guarantee smooth operating cycles, lowering the risk of distress.

Nairobi Securities Exchange (NSE) listed non-financial corporations will be the focus of this study. Central Bank of Kenya (CBK) regulates capital and liquidity decisions for financial companies, although non-financial enterprises are not subjected to these

rules despite being a part of the Capital Markets Authority (CMA). Thus, because non-financial corporations are theoretically free to choose any capital structure and liquidity configuration in order to finance their operations, it follows that these companies may adopt any liquidity configuration of their choosing. Non-financial companies are predisposed to gearing too much and incurring severe financial hardship because of this laissez-faire attitude (Bitok, Masulis, Graham, & Harvey, 2017).

1.1.1 Liquidity Management

Liquidity management is defined as capacity for firms to meet cash and collateral requirements without suffering losses (Saunders & Cornett, 2005). Yahaya and Lamidi (2015) defined liquidity management as the process of trading assets at the present price in the market. Bhunia (2012) described management of liquidity as the ability of management and to proprietors to decrease the vulnerability to liquidity risk. Falling asset values, inadequate debt, and limited marketability of assets are all signs of poor liquidity management (Brealey, 2012).

Liquidity management is one of the many important factors that finance managers should examine when making decisions about how their companies use their financial resources. The ability to meet operational commitments is determined by decisions about what resources and liabilities an organization should have (Harris, 2005). Organizations that are successful strive for a balance between revenues and locked-up capital. Retaining excess inventory reduces profit margins, whereas keeping insufficient inventory prevents an organization from serving client needs adequately; this necessitates the use of an ideal level of liquidity. These claims imply that liquidity management is a critical component of organizational operations, with significant

implications for efficiency in both short- as well as long-term (Akoto, Awunyo & Angwor, 2013).

Liquidity management for firms is measured using several ratios as indicated by Mahavidyalaya et al. (2010) and Devraj (2014) which comprise of; the current ratios, quick ratio or acid test, and absolute liquid ratio/cash ratio that is the cash and cash equivalent. Despite there being similarity in the current ratio and quick ratios, there are more provisions given in capacity of precise assessment by the quick ratio on the capability of a firm to pay its current obligations. However, absolute liquid ratio is regarded more as a perfect measure of liquidity in comparison to liquid ratio and current ratio (Bhunia et al., 2011). The current study used current ratio as measures of liquidity management as it has been widely used in previous literature (Akoto et al., 2013; Devraj, 2014).

1.1.2 Financial Performance

Almajali, Alamro, and Al-Soub (2012) describe financial performance as a company's capacity to meet a set of financial objectives, like profitability. The degree to which a company's financial standards have been fulfilled is referred to as financial performance. It displays how well financial goals have been met (Nzuve, 2016). Financial performance, as per Baba and Nasieku (2016), indicates how a company uses assets to generate revenue and hence helps stakeholders in their decision-making. The current research defines financial position as a company's ability to earn income from its assets.

Financial performance is vital to shareholders, investors, and, by extension, the entire economy. The return on investment is completely worthwhile to investors, and having a good firm can provide greater and long-term revenue to individuals who invest

(Fatihudin & Mochklas, 2018). A company's financial performance is critical to its health as well as existence. A company's excellent performance demonstrates its efficiency and effectiveness in managing its assets during operations, investments, and financial transactions (Karajeh & Ibrahim, 2017).

Different ways of measuring financial performance are employed, and they should be unified. Return on Assets (ROA), business size, Return on Equity (ROE), and Return on Sales (ROS) are financial performance variables identified by Ngatia (2012). Carter (2010) used Tobin's Q and ROA to gauge financial success, but Wang and Clift (2009) employed ROA and ROE. The most recognized ways of measuring financing performance are ROA as well as ROE. The ROA is a metric of evaluating company's profitability relative to its total assets whereas ROE measures the net income achieved as percentage of shareholders equity (Mwangi & Murigu, 2015). Baba and Nasieku (2016) posit that market based metrics like earnings per share, dividend yield, market to equity book value and market capitalization can too be employed in financial performance measure. The current research used ROA as a metric of financial performance as it is the most recognized measure (Fatihudin & Mochklas, 2018).

1.1.3 Liquidity Management and Financial Performance

The liquidity preference theory by Keynes (1936) mentions that the managers of a firm can make investments in negative net present value projects with the availability of surplus liquidity. According to the hypothesis, an increased liquidity could trigger more unnecessary administrative waste and inefficiency, that has a negative impact on the profitability of the firm. Demsetz and Lehn (1985) found that when there is excess liquidity, large firms face fewer growth opportunities compared to small ones, which triggers an overinvestment issue, hence negatively affecting firm profitability.

Likewise, Gul and Tsui (1998) observe that increasing financial leverage appears to lower agency costs since managers are legally obligated to repay interest and loans, which reduces liquidity misuse and so enhances company profitability.

The company's FP greatly relies on its liquidity since it has a direct influence on the firm's profitability (Awuor, 2014). This implies that liquidity can highly affect the value of any firm. Management should avoid inadequate and excessive investment in current assets. Excessive investment in current assets tends to impair profitability of the firm as idle investment would be earning nothing for the company. If there is surplus investment, it should be invested in short-term securities to earn some income for the company and improve its value. Inadequate current assets should be avoided as it poses a threat to the solvency of the firm and may lead to the firm's inability to meet its account payables. This might lead to the company experiencing difficulties in borrowing funds, scare away potential investors, customers and creditors. Therefore, if a need for working capital arises as a result of increased business activities, arrangements should be made immediately to ensure that the firm borrows from cheap sources of finance to reduce its liabilities as well as improving the profitability of a firm (Pandey, 2010).

Osman (2007) maintains that an efficient management of the cashflow system is important since it demonstrates the profitability of SMEs. The long term objective of an enterprise is to generate adequate profits but failure to generate adequate cash reserves for its daily undertakings and profits for the owners renders it less useful. Sharma and Kumar (2011) emphasized that WCM strives to attain stable liquidity and profitability levels. All the elements of working capital such as cash, account

receivables, marketable securities and inventory management significantly contribute to the level of output by any firm.

1.1.4 Non-Financial Firms Listed at the Nairobi Securities Exchange

The only organization tasked with listing companies in Kenya is the Nairobi Securities Exchange. NSE was incorporated in 1954, and its articles of incorporation (called stock certificates) were registered under the Companies Act (Act 486) of the laws of Kenya. The listed firms cannot carry any transactions without the supervision and facilitation of NSE. NSE has over a decade left to determine which sector will produce the next biggest number of firms, with insurance, services & commercial, automobiles, and other goods, petroleum & energy, banking, investments, manufacturing and allied, agriculture, construction, technology and telecommunications (NSE, 2020). Twenty two banking and insurance businesses were included on the list, while 42 other companies were listed outside of the financial industry.

Non-financial firms listed at the NSE have witnessed several cases of liquidity problems among some of the firms resulting into receivership/statutory management, hostile takeovers and government bailout (Doan, 2020). Kenya Airways, Home Africa, Uchumi Supermarkets, Mumias Sugar Company, and Transcentury, among others, have recorded massive losses as well as finding themselves in significant debt situations, owing creditors far beyond their net worth. These trends, together with absence of a unifying theory, highlight the desire for more research into the implications of liquidity management on the financial performance of listed companies (Makau, 2019).

To enhance their financial performance, NSE listed non-financial firms should develop mechanisms of managing liquidity. Decisions about liquidity management are crucial to a company's overall strategy for maximizing shareholder wealth (Siddiquee, Khan, Shaem & Mahmud, 2009). Several publicly listed companies have faced financial difficulties in recent years, resulting in their suspension from trading, the closure of some activities, or the placement of the company under receivership. One of the causes has been suggested as their failure to satisfy payments to creditors and bank commitments (Njagi, 2016).

1.2 Research Problem

When firms experience difficulties with liquidity management, they may transfer their expenses to creditors this is very risky for firms and could bring about bad credit terms. In the long run greatly affects effectiveness (Bordeleau, 2010). The importance of liquidity management has been well embraced by institutions. Absence of regulations makes companies to hold liquid assets to a point that they maximize the profitability together with financial performance.

Non-financial companies listed at the NSE possess vital role to play in the enhancement of economic growth of economies and fulfilling their objectives. The lack of a vibrant non-financial sector will limit the growth of the economy of a country. By having an optimal liquidity, firms in the sector will experience growth in benefits such as cost reduction, an optimal capital mix for investments, which makes this study crucial (Madan, 2015). The struggles experienced by some of the listed non-financial firms such as Uchumi, Kenya Airways, Mumias, Eveready, Home Afrika and Unga group relating to WCM motivates the current study to focus on this area.

Various empirical researches have been conducted on the impact of WCM on performance, but the results have been varied. This can be explained by the different methodologies used as well as conceptualizing of the study variables. Different contextual backgrounds can also explain the differences in previous findings. Ajibolade and Sankay (2019) carried out the study to determine whether liquidity affects profitability of firms in Nigeria and concluded that liquidity does not significantly affect ROA. Shukla (2019) analyzed the effect of management of liquidity on commercial banks' financial performance in Rwanda. The findings revealed that holding liquidity constant, financial performance would increase. On the other hand, Olagunju (2020) in Nigeria on effective liquidity management and commercial banks' performance established that for effective work and continuity, liquidity must not be compromised. These researches were however conducted in diverse contexts and due to social an economic difference, thus the outcomes fail generalization among NSE listed firms.

Locally, Sanghani (2019) on the liquidity effect on financial performance of NSE listed firms showed that a rise in the ratio of operating cash flow had a positive impact on NSE listed firms' performance. Maina (2020) assessed the management of liquidity among oil firms in Kenya and recorded that the management of liquidity does not impact companies' profitability. Makau (2019) conducted a study using ordinary least squares concluded that liquidity financing has a substantial positive influence on ROA. The focus was however on liquidity financing and not liquidity management. From the foregoing, it is evident that previous studies in this area have arrived at contradicting findings. The previous studies have also used various operationalization and methodologies to achieve their objectives and this might explain the differences in findings. Different contextual backgrounds might also explain the differences. The lack of agreement among prior researchers, both internationally and locally, is motivation

enough to pursue additional research in this field. This study leveraged on these research gaps by providing answer to the research question: What is the effect of liquidity management on financial performance of non-financial firms listed at the NSE?

1.3 Research Objective

To establish the effect of liquidity management on financial performance of non-financial firms listed at the NSE.

1.4 Value of the Study

This research will be of great implication to liquidity management theories such as liquidity preference theory, trade off theory and operating cycle theory by adding to their development. Academicians, researchers, and students who intend to do research in this or similar fields will utilize the research findings as a guide. The study will aid them in identifying other subjects for future research.

The findings are expected to be useful to firm managers who are responsible for managing investors' assets, approving investment decisions, and, most importantly, obtaining financing for these investments, as this research offers valuable information as well as recommendations to aid them in making informed decisions that lead to optimal firm performance.

This research will be helpful to government and regulators in the creation and implementation of laws and regulations governing liquidity, in order to provide stability in company financial performance and prevent the economy's spiral effects. This will aid in the progress of businesses and the improvement of the economy as a whole.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter clarifies the theories on which liquidity management and financial performance is based. It further discusses the previous empirical studies; knowledge gaps identified and summarizes with a conceptual framework and hypotheses displaying the expected study variable relationship.

2.2 Theoretical Framework

This segment examines theories which underpin the research of capital structure and financial performance. Liquidity preference theory, trade-off theory and operating cycle theory are all dealt with in theoretical reviews.

2.2.1 Liquidity Preference Theory

This is the main theory on which the study is based. Keynes (1936) introduced the theory which describes to the total money the public can hold given the level of interest rates. Holding liquid assets can be explained by 3 reasons; First, for ordinary transactions, second, for precautionary purposes against emergencies, and third they are employed for speculative purposes. Keynes showed that transaction deposits are inversely proportional to the rate of interest (Ferrouhi & Lehadiri, 2013). The main argument in this theory is that an increase in money supply at low interest rates will result in cash balances increase and discourage savings and investment. The reason is that economic entities expect the interest rates to rise later in the future.

Diamond and Rajan (2001) provides a positive criticism of the theory by arguing that the theory focused on delivering abilities to meet the needs of liquidity. There is a correlation between management of liability and liquidity. It is a core tool to make decisions setting out to utilize the value of stakeholders. Asset liability management entails managing the elements of balance sheet which mainly entails assessing and quantifying risks and with regard to the structure of asset/liabilities implemented by financial firms to alleviate the eminent risks. Gul and Tsui (1998) also critique the theory by arguing that the theory suggested that the firm did not have to maintain old liquidity standards as they have no impact on asset stability but does not offer liquidity standards that should be followed.

The relevance of the theory to the research is that is gives firms a chance to alleviate risk and to overcome the inconsistencies of interest income after accounting for interest expense for the short term period and overall value of firms is sustained for a long period (Ferrouhi & Lehadiri, 2013). The advocates of the theory posit that an appropriate liquidity, solvency and profitability enable firms' credit risk to be managed and reduced. The main goal of the theory is to connect assets and liabilities in hedging liquidity risk.

2.2.2 Tradeoff Theory

The theory by Myers (1984) states that the most crucial role of a firm is wealth maximization through profitability while maintaining adequate levels of liquidity. An attempt to increase profitability by lowering liquidity can be detrimental to a company (Shin & Soenen, 1998). The trade-off model therefore explains the ways in which a firm can set optimal levels of cash holding by comparing the marginal costs of holding

cash and benefits of the same. A massive investment in current assets will lower the ROA of a firm because overinvesting in such assets generates low returns.

Supporters of the theory support the assumptions it makes on the existence of imperfect markets that face information asymmetry problems. Additionally, they point out the theory's ability to explain the existence of optimal liquidity levels that lower costs of financing while maximizing benefits to firms (Sheikh & Wang, 2011). Those that criticize the theory do not support the assumption that a positive relation between earnings and liquidity neither do they support the static model (Awan & Amin, 2014). It should however be noted that the theory expounds the concept of risk and return in finance by stating that firms choose their optimal cash holding level and this should be done through a comparison of marginal cash holding cost and benefits.

Following the theory's assumption on optimality, one hypothesis of the study is that firms should set a targeted liquidity levels aimed at the maximization of profits and enhancement of firm value by efficiently managing liquidity. The hypothesis stated is supported by the theory's assumption that optimal levels will be achieved when costs and benefits of different alternatives can be achieved at minimal levels of information asymmetry and agency costs (Frank & Goyal, 2003). Another assumption of the theory on existence of mean reverting and target adjustments also increases the need for an optimal level of liquidity and financial performance. This study extends the above assumptions by studying whether there is an optimal liquidity level that maximizes financial performance hence lowering the levels of information asymmetry and agency costs.

2.2.3 Operating Cycle Theory

The theory can be traced from the published works of Weston and Brigham (1979), and is based on a firm's operational cycles. The recommendation from the theory is that the flow of liquidity is generated through an increase in the potential liquidation esteem potential stability to incorporate payment reasoning measures of the operational activities of a firm. A sharper vision of a firm's liquidity management as well as an analysis of dissolvability's proportion indicators can be obtained by combining debtors and inventory turnover measurements into its operational cycle (Weston & Brigham, 1979). It is possible to calculate the number of times normal receivables inside a company can be converted into cash using receivable turnover data. By altering the credit and accumulation strategy a firm can impact the current debtor's level.

An operating cycle is calculated by multiplying the number of days in which stock is outstanding by the number of days in which sales are outstanding. A change in credit as well as collection procedures has a direct impact on the mean outstanding accounts receivable amount on a company's annual sales. By increasing credit sales, an increase in receivables will be observed which will simultaneously lower the receivables turnover while extending the receivable collection period thereby lowering liquidity levels. A higher current and basic analysis proportion is hence unavoidable based on the selection of the company outcomes when a company significantly speculates normal receivable over a prolonged day and age (Richards & Laughlin 1980).

The theory received criticisms from Richards and Laughlin (1980) who stated that the assumption of ignoring liquidity requirements tied to a firm in assessing current liabilities obligations. The significance of the theory in the present research is that it supports the assumption that effective liquidity management is necessary in ensuring a

smooth operating cycle which ultimately improves the firm's financial performance and maximizes its value. The theory is relevant to the current study as it postulates a positive relationship between liquidity management and financial performance.

2.3 Determinants of Financial Performance

Components both inside and outside the company can have an impact on the firm's performance. Liquidity management, leverage, dividend decisions, firm size, and organizational culture are just a few of the internal aspects. Management has no influence on external forces. They are variables that are beyond the control of the company, but they must be addressed with appropriate tactics (Athanasoglou, Brissimis & Delis, 2005).

2.3.1 Liquidity Management

Cheluget, Gekara, Orwa, and Keraro (2014) argued that a link exist between companies' financial performance and their liquidity and found that performance is substantially determined by liquidity management. Liquidity and solvency indicators had a substantial influence on increasing cost efficiency; businesses with higher bought input expenditures comparable to capital have less chance to become efficient when solvency and liquidity are taken into account (Arif, 2012).

When liquidity and solvency indicators are taken into account, businesses with higher spending on bought inputs compared to capital are less likely to increase efficiency (Levi, Russell, & Langemeier, 2013). According to Liang Fu (2016), liquidity is another term for company liquidity which refers to amount of liquid assets held in the books of accounting. When dealing with companies with liquidity risk, the corporate investment behavior of family firms has a reduced financial distress risk tolerance, as shown by their much greater degree of corporate liquidity (Liang Fu, 2016).

2.3.2 Firm Size

The economies of scale amount a company earns is proportional to its size. The larger the company, the lesser production scale and the higher the operational activities efficiency due to substantial economies of scale. Regardless of their size, huge corporations might lose control of their strategic as well as operational activities, resulting in a decrease in efficiency (Burca & Batrinca, 2015).

Large corporations have more market power, besides can diversify their portfolios more. They're also more prone to suffer from organizational wastage if the company grows rapidly. The size of the company has a substantial impact on the quantity of cash flow that can be invested. The number of employees, property owned, and sales volume are all important factors to consider when defining the firm's size (Almajali et al., 2012).

2.3.3 Financial Leverage

This intuition makes it quite easy to determine the presence of an optimum capital structure. Inadequate debt capacity exists because companies take into consideration both the benefits received in the form of reduced taxes as well as the overall expenses that would be paid in the case of bankruptcy (Kraus & Litzenberger, 1973). If corporate bankruptcy was expensive, Senbet (2012) said, then it fulfilled a key gap between the Modigliani-Miller tax-adjusted model and the known fact that financial debt financing is only used a small percentage of the time (Senbet et al., 2012). Using debt offers tax advantages for a company, which is part of the trade-off hypothesis. This is one of two sets of findings, with findings from other research demonstrating that greater leverage results in increased volatility in share prices with regard to private information; a company's final destiny relies on problems that remain undisclosed to the broader public (Nyamboga, Omwario & Muriuki, 2014).

Financial leverage can be advantageous or can lead to financial distress depending on the type of debt and how the finances are utilized by the finance managers. Prudent allocation and use of the borrowed funds lead to improved financial performance (Salazar, Soto & Mosqueda, 2012). Theoretically, debt funding is expected to impact the working capital levels of such a company which in effect influences the level of financial performance (Eckbo, 2008).

2.4 Empirical Review

Local as well as global researches have determined the relation between liquidity and financial performance, the objectives, methodology and prior research results have been discussed in this segment.

2.4.1 Global Studies

Vintila and Nenu (2020) determined the effects of liquidity management on the performance of commercial banks. The study applied a descriptive research design. The sample period was from 2011 to 2016. This study used secondary data that was obtained from the Central Bank. A regression model was used in data analysis. The findings are that there were fluctuations in financial performance while liquidity management and capital adequacy registered steady growth. This shows that banks manage their liquid assets well to satisfy customers' demands for cash

Wuave, Yua and Yua (2020) examine the effect of liquidity management on financial performance of banks in Nigeria for the period 2010 to 2018. The study uses secondary data from five banks listed bank on the stock exchange in Nigeria. The study uses panel regression analysis in estimating the model and Hausman test while making a choice between fixed effect and random effect model. The study finds that liquidity ratio have

positive and significant effect on financial performance of banks as measured by ROA, ROE and net interest margin

Altaf and Ahmad (2019) undertook a research on the link amongst liquidity financing and firm performance in India. The impact of financial limitations on the link between liquidity finance and performance was also explored. The target population was 437 non-financial firms in India. Utilization of secondary data collected from Capitaline datables for the period spanning 2007- 2016 was evident. In arriving to the results, the study used a two-step generalized method of moments approach. Additionally, the research discovered that firms that are less financially constrained are able to finance more liquidity by short term debt percentage.

Nyeadi, Sare, Aawaar, and McMillan (2018) conducted an empirical research on the liquidity requirements determinants for Ghanaian stock exchange listed companies. The research target population was 28 companies registered on the Ghana Stock Exchange, with an 8-year study period spanning 2007 to 2014. A dynamic panel system of General Methods of Moments (GMM) was utilized to test the hypotheses. This estimator is able to generate consistent as well as unbiased findings even when an endogeneity exists in a model. As a result, the findings are considered to be more reliable and efficient. The study revealed that liquidity is determined by leverage, operating cycles, GDP growth, profitability, firm size and age of the firm in the Ghanaian listed firms.

Tingbani et al. (2018) investigated how WCM influences quoted company profitability on the London Securities Market. Between 2004 and 2014, the research gathered unbalanced panel data from 802 companies and used a dynamic panel approach to analyze it. The findings revealed that a variety of contingency elements, such as environmental management, assets, and competences, had a substantial impact on the

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relationship between profit levels and WCM. WCM also had a substantial impact on the company's profitability, according to the research.

2.4.2 Local Studies

Kyalo (2017) researched the liquidity management influence on deposit taking SACCOs' financial performance in Kenya. The research used 27 deposit taking SACCOs as the research population in gathering secondary data covering the years 2010-2014. Regression analysis models formed the basis of data analysis and interpretation. The outcomes recorded financial performance positively correlates to liquidity, funding risk of liquidity, efficiency of operations, log of assets and quick ratio. The research did not target non-financial companies but only targeted deposit taking SACCOs.

In Kenya, Mweta and Kipronoh (2019) investigated how WC requirements influence quoted construction and related firms' performance. The researchers utilized an explanatory research methodology to collect archival data from 2012 to 2016 and analyzed it using the regression method. The findings revealed a non-significant relationship between inventory days, debtors days, payables period, CCC, and ROE and ROA. The findings, however, revealed a link between inventory days, payables period, debtors' days, CCC, as well as gross profit margin.

Mutura (2019) sought to establish WCM effect on financial performance of small and medium enterprises (SMEs) in Kenya. The population for the study was all the 1539 SMEs in Nairobi Central Business District while the sample for the study was 155 SMEs in Nairobi City County. Secondary data was obtained on an annual basis for a duration of five years (January 2013 to December 2017). A descriptive cross-sectional research methodology was utilized to evaluate the association between the variables,

and a multiple linear regression model was used to do so. The inventory conversion cycle as well as cash conversion cycle provided negative as well as statistically significant values for this investigation, according to the findings. Average payables period yielded positive as well as statistically substantial figures though average receivables period and firm size were concluded to be statistically insignificant determinants of financial performance of SMEs in Nairobi County, Kenya

Makau (2019) examined the impact of liquidity financing policies on the financial performance of NSE-listed enterprises. The research was grounded on liquidity cycle theory, the transaction costs theory and the trade of theory of liquidity. The population of 45 non-financial firms quoted on the NSE as of December 31, 2018 was studied using a descriptive study design. The study relied exclusively on secondary data, gathered via a data collection sheet over a five-year period from 2014 to 2018. The acquired data was sorted and entered into SPSS, and the affiliation between the dependent and explanatory variables was established using descriptive statistical techniques such as the mean, maximum and minimum values, standard deviation, and the regression technique. The findings demonstrated a negative as well as statistically substantial association between aggressive financing policy and ROA, as well as a negative and statistically significant connection between leverage and ROA. The results also revealed that the affiliation between company size and ROA was positive but statistically insignificant, whereas the correlation between liquidity and ROA was negative but statistically substantial.

Njue (2020) investigated the effect of liquidity management on the financial performance of MFI's in Kenya. Secondary data from 2012 to 2016 on the study variables were deduced from the audited financial statements of the MFIs under

consideration. The desired population of the research consisted of all the twenty-six MFIs in Kenya that were members of AMFI and available at the CBK website. The study used both descriptive and inferential statistics to evaluate the data. The analysed data indicated that liquidity management practices fundamentally influenced the financial performance of MFIs in Kenya.

2.6 Summary of the Literature Review and Research Gaps

This chapter critically reviewed the documented relationships between liquidity management and financial performance. There is a clear indication from the studies and conclusions evaluated those financial scholars do not concur on how liquidity management impacted financial performance. The study shows some of the different researchers' conceptual arguments on the relationship between the factors that have been established. In this critical review of literature, three key theories underpinning the relationships between liquidity management and financial performance have been highlighted. These are trade off theory, liquidity preference theory, and operating cycle theory.

Numerous relevant publications on the study variables were analyzed as part of the empirical review to identify research gaps and analysis approaches. Liquidity management has an impact on financial performance, according to the studies evaluated. However, the results were mixed, with some research concluding that there is a strong beneficial association and others concluding that there is none. Nevertheless, the investigations were all conducted using various approaches and data was collected over different time periods, which could explain the disparities in the outcomes. The study contexts were also different with some studies focusing on a single sector and other focusing on several sectors. The operationalization of the study variables has also

been varied and this can also explain the differences in previous studies. This study will leverage on these research gaps.

2.6 Conceptual Framework

The correlation between the variables is depicted in the model below. Liquidity management, as measured by the ratio of current assets to current liabilities will be the study's predictor variable. Firm size and leverage will be the control variables. Financial performance as measured by ROA will be the dependent variable.

Figure 2.1: The Conceptual Model

Predictor variable   **Response variable**

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┌─────────────────────────┐
│ Liquidity management    │
│   • Current assets to   │─────────────┐
│     current liabilities │             │              ┌──────────────────────────┐
│                         │             │              │ Financial Performance    │
└─────────────────────────┘             │              │                          │
                                        └─────────────▶│   • ROA                  │
                                        │              │                          │
┌─────────────────────────┐             │              └──────────────────────────┘
│ Firm size               │             │
│   • Total assets        │             │
│ Financial leverage      │─────────────┘
│   • Debt ratio          │
└─────────────────────────┘
```

Control Variables
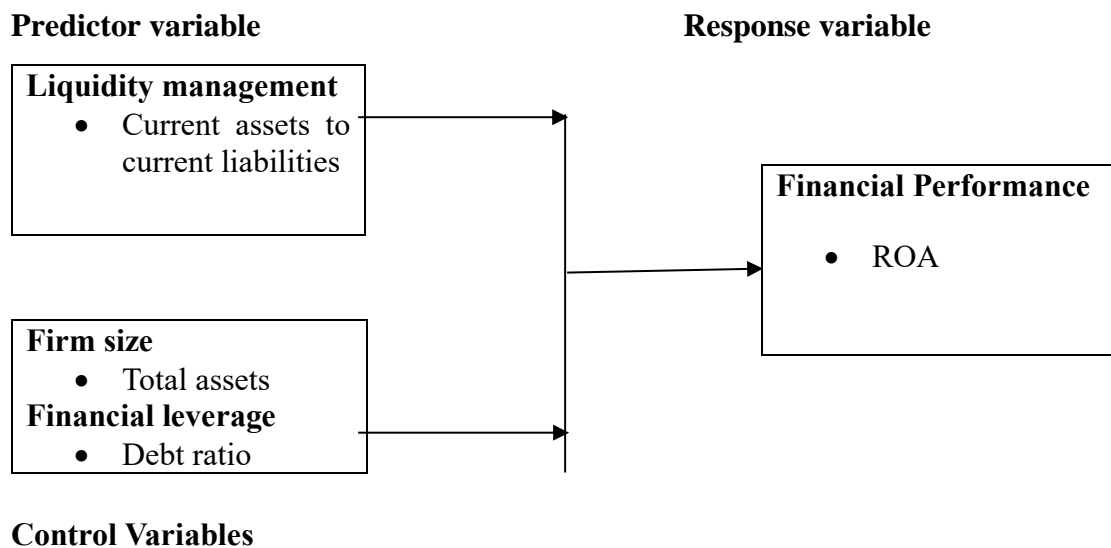
Source: Researcher (2021)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the ways in which research is carried out to fulfill the objective which was to determine how liquidity management affects financial performance. In particular, the study highlighted the; the design, diagnostic tests, data collection as well as analysis.

3.2 Research Design

To determine how non-financial firm's liquidity management and performance are related, a descriptive approach was used. A descriptive design was adopted to determine how liquidity management and performance of NSE listed non-financial firms relate. This design was appropriate since the nature of the phenomena is of key interest to the researcher (Khan, 2008). It was also sufficient in defining the interrelationships of the phenomena. This design also validly and accurately represented the variables thereby giving sufficient responses to the study queries.

3.3 Population

A population is all of the observed elements from a collection of events, which include things like research inquiries (Burns & Burns, 2008). All the 42 NSE listed non-financial firms as of December 2020 formed current study's population (see appendix I).

3.4 Data Collection

In this inquiry, secondary sources were used, which were retrieved from annual published financials of the listed non-financial firms from 2016 to 2020 and recorded

in a secondary data collection schedule. The publications were drawn from CMA publications reports of the specific sampled listed companies. The specific data collected include total assets, net income, current liabilities and current assets.

3.5 Diagnostic Tests

To ascertain model viability, a number of diagnostic tests were done, like normality, stationarity, multicolinearity, homogeneity and autocorrelation. The assumption of normality was that the dependent variable's residual was normally distributed and closer to the mean. This was accomplished by use of the Shapiro-wilk test or Kolmogorov-Smirnov test. If a variable had no normal distribution, it was adjusted using the logarithmic adjustment methodology. Stationarity test was utilized in determining if the statistical properties such as variance, mean, as well as autocorrelation change with the passage of time. This property was ascertained using the augmented Dickey Fuller test. In the event the data does not meet this property, the robust standard errors were utilized (Khan, 2008).

Autocorrelation is a measure of how similar one time series is when compared to its lagged value across successive timings. The measure of this test was done using the Wooldridge test and in the event that the presumption was breached the robust standard errors were used in the model. Multicollinearity exists when a perfect or near perfect linear relation is made between a number of independent variables. Variance Inflation Factors (VIF) and tolerance levels were utilized. Any multicolinear variable was eliminated and a new measurement used in place of the variable that has co-linearity. If the variance errors in a regression are distributed among the independent variables, heteroskedasticity confirms this. This was tested using the Breuch Pagan test and if data

does not meet the homogeneity of variances assumption, robust standard errors were employed (Burns & Burns, 2008).

3.6 Data Analysis

Version 24 of the SPSS software was utilized for data analysis. Quantitatively, the tables present the results. In calculating central tendency and dispersion measurements, including a standard deviation and mean for each variable, descriptive statistics were used. Regression and correlation were the basis of inferential statistics. Correlation determined the scope of the affiliation between the study variables and the cause and effect of the variables was determined by a regression. The relationship between independent and dependent variables was determined linearly by a multivariate regression model.

3.6.1 Analytical Model

The following equation was applicable:

$Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Where: Y = Financial performance as given by net income to total assets ratio.

β_0 = the slope of the regression equation's y intercept.

$\beta_1 \ldots \beta_3$ = coefficients of regression

X_1 = Liquidity management calculated by dividing current assets by current liabilities

X_2 = Financial leverage calculated by dividing total debt by total assets

X_3 = Firm size as given by logarithmic expression of total assets

ε = error term

3.6.2 Tests of Significance

Parametric tests were used to establish the general model's relevance as well as the significance of specific coefficients. The F-test determined the overall model meaning and this was done with ANOVA. A t-test assessed the importance of each variable.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND FINDINGS

4.1 Introduction

This chapter looks into CMA data to see how liquidity management affects the financial performance of non-financial companies. Correlation and regression data were represented in tables utilizing descriptive statistics, as indicated in the segments below.

4.2 Descriptive Analysis

This study presents the average, maximum, minimum, and standard variables. Table 4.1 displays the variable statistics. For all 42 financial companies whose data was gathered, SPSS was utilized in the analysis from 2016 to 2020. The figures are listed below.

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	210	-.5700	.3900	.040666	.1218198
Liquidity management	210	.3431	10.0893	2.210831	1.5149257
Financial Leverage	210	.025	1.419	.48380	.248798
Firm size	210	7.654	11.577	9.72299	.903608
Valid N (listwise)	210				

Source: Research Findings (2021)

4.3 Diagnostic Tests

On the data gathered, diagnostic tests were run. The research utilized a 95% confidence interval or a 5% significance threshold to obtain variable information. Diagnostic tests were helpful in determining if the data was false or true. As a result, the closer the confidence interval is to 100 percent, the more correct the data utilized is assumed to

be. The tests performed in this example were normality, multicollinearity, heteroskedasticity, as well as autocorrelation.

4.3.1 Normality Test

This study included the Shapiro-Wilk and Kolmogorov-Smirnov tests. This criteria stated that data was considered normal if the probability was higher than 0.05.

Table 4.2: Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
ROA	.161	210	.300	.869	210	.853
Liquidity management	.173	210	.300	.918	210	.822
Financial leverage	.178	210	.300	.881	210	.723
Firm size	.175	210	.300	.874	210	.812
a. Lilliefors Significance Correction						

Source: Research Findings (2021)

Since the p values are above 0.05, the aforementioned findings indicate that the data was regularly distributed. As a result, the normal distribution null hypothesis was accepted, indicating that the researcher fails to reject the null hypotheses.

4.3.2 Multicollinearity Test

William et al (2013) defined this characteristic as correlations between the predictor variables. This attribute was tested using VIF. Field (2009) says that VIF values over 10 suggest that this feature exists.

Table 4.3: Multicollinearity Test

Variable	VIF	1/VIF
Liquidity management	3.418	0.293
Financial leverage	2.836	0.353
Firm size	3.291	0.304

Source: Research Findings (2021)

Table 4.3 shows the VIF values that were discovered to be less than ten, indicating that Multicollinearity was not present, as per Field (2009).

4.3.3 Heteroskedasticity Test

The error process in cross-sectional units may be homoscedastic, yet vary across units called groupwise Heteroskedasticity. Breuch Pagan is calculated for each group using the hettest program. Heteroskedasticity is a term used to describe the heteroskedasticity of residuals. According to the null hypothesis; $\sigma^2_i = \sigma^2$ for i =1...Ng, where Ng is the cross-sectional units.

Table 4.4: Heteroskedasticity Test

Modified Wald test for group wise heteroskedasticity in regression model
H0: sigma(i)^2 = sigma^2 for all i
chi2 (210) =   229.56
Prob>chi2 =   0.2314

Source: Research Findings (2021)

The null hypothesis of Homoskedastic error terms is not rejected, according to the results in Table 4.4, which are supported by a 0.2314 p-value

4.3.4 Autocorrelation Test

The Breusch-Godfrey autocorrelations test was employed to detect serial correlations in a model's idiosyncratic term since typical serial correlation biases make the results more efficient.

Table 4.5: Autocorrelation Test

Wooldridge test for autocorrelation in panel data H0: no first-order autocorrelation
F(1,   210) =   0.362
Prob> F =   0.3921

Source: Research Findings (2021)

Table 4.5 shows that the null hypothesis of no serial connection is not rejected since the
p-value of 0.3921 is significant.

4.3.5 Stationarity Test

The test results for the Levin-Lin Chu unit root are shown in Table 4.6. Panels with unit
roots were discarded because the p-values for all variables were less than 0.05. With
this, the panel data for all the variables became stationary.

Table 4.6: Levin-Lin Chu unit-root test

Levin-Lin Chu unit-root test			
Variable	**Hypothesis**	**p value**	**Verdict**
ROA	Ho: Panels contain unit roots	0.0000	Reject Ho
Liquidity management	Ho: Panels contain unit roots	0.0000	Reject Ho
Financial leverage	Ho: Panels contain unit roots	0.0000	Reject Ho
Firm size	Ho: Panels contain unit roots	0.0000	Reject Ho

Source: Research Findings (2021)

4.4 Correlation Analysis

To identify the connection between variables, correlation analysis was employed. The
results are as shown in Table 4.7.

Table 4.7: Correlation Analysis

		ROA	Liquidity management	Financial Leverage	Firm size
ROA	Pearson Correlation	1			
	Sig. (2-tailed)				
Liquidity management	Pearson Correlation	.196**	1		
	Sig. (2-tailed)	.004			
Financial Leverage	Pearson Correlation	-.477**	-.005	1	
	Sig. (2-tailed)	.000	.939		
Firm size	Pearson Correlation	.133	.028	-.018	1
	Sig. (2-tailed)	.054	.689	.784	
**. Correlation is significant at the 0.01 level (2-tailed).					
b. Listwise N=210					

The correlation results reveal liquidity management has a positive and significant association with ROA of non-financial firms (r =.196, p =.004). The results also reveal that financial leverage has a negative and significant association with ROA (r =-.477, p =.000). Firm size showed positive but not significant relationship with non-financial company financial success (r =.133, p =.054).

4.5 Regression Analysis

Liquidity management, leverage and firm size were the variables upon which performance was modeled. The significance level for the analysis was set at 5%. The regression result was contrasted to the crucial value from the F – table. The results are listed below.

Table 4.8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.541[a]	.292	.282	.1032250

a. Predictors: (Constant), Firm size, Liquidity management, Financial Leverage

Source: Research Findings (2021)

The R square depicts the variables of the response variable because of the predictor variables changes. R square was 0.292, showing that differing liquidity management; financial leverage and size represent 29.2% of the variability in non-financial companies' financial performance. 70.8% of the financial performance variation may be ascribed to factors outside the model. Furthermore, as demonstrated by a 0.541 correlation coefficient(R), the independent factors had a high link with financial performance.

Table 4.9: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.907	3	.302	28.360	.000[b]
	Residual	2.195	206	.011		
	Total	3.102	209			
a. Dependent Variable: ROA						
b. Predictors: (Constant), Firm size, Liquidity management, Financial Leverage						

Source: Research Findings (2021)

The significance level is set at 0.000, which is much below p=0.05. This means that the model was satisfactory to assess the liquidity management, financial leverage and firm of NSE-listed businesses in non-financial sector.

The R-square indicated the way the variables were connected. The significance of the link between responder and predictor factors was shown by the p-value of the sig. column. The confidence interval of 95% indicates a p-value of less than 0.05. As a consequence, a p-value above 0.05 indicates that the predictor and response variable are unrelated. The results are listed below.

Table 4.10: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.176	.089		-1.976	.049
	Liquidity management	.232	.008	.239	3.990	.000
	Financial Leverage	-.257	.029	-.524	-8.774	.000
	Firm size	.009	.005	.106	1.815	.071
a. Dependent Variable: ROA						

Source: Research Findings (2020)

All other factors, except for company size, have generated significant positive findings (high t-value, $p < 0.05$). Because a p value greater than 0.05 is displayed, the business size generated a positive but modest result.

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The following equation was created:

$$Y = -0.176 + 0.232X_1 - 0.257X_2$$

Where,

Y = Financial performance

X_1 = Liquidity management

X_2 = Financial leverage

The constant = -0.176 in the model indicates that performance would be -0.176 if the variables (Liquidity management, financial leverage and company size) were all zero. While firm size was insignificant, a unit rise in financial leverage resulted in a 0.257 decline in performance, but a unit rise in liquidity management resulted in 0.232 increase in financial performance.

4.6 Discussion of Research Findings

The research examined how WCM impacts NSE non-financial firms' performance. The independent variable was the WCM operationalized as the ratio of current assets to current liabilities. The control variables were financial leverage measured by debt ratio and firm size measured as natural log of total assets. ROA was used to measure financial performance which was the response variable.

The correlation coefficient of Pearson showed that liquidity management has a significant positive association with financial performance while financial leverage has a significant negative association with performance measured by ROA. The research too exhibited that the correlation between firm size and the success of NSE non-financial companies has been positive but not substantial.

The result shows that 29.2% of changes in the response variable according to R^2, which implies other factors other than the model explain 70.8% of performance changes. The predictor variables of liquidity management, financial leverage and size of a business explained 29.2% of changes in ROA. With an F-value of 28.360, the model was significant at 95% confidence interval. This shows that the connections between the variables were represented by a sufficient model.

The findings are consistent with Vintila and Nenu (2020) who determined the effects of liquidity management on the performance of commercial banks. The study applied a descriptive research design. The sample period was from 2011 to 2016. This study used secondary data that was obtained from the Central Bank. A regression model was used in data analysis. The findings are that there were fluctuations in financial performance while liquidity management and capital adequacy registered steady growth. This shows that banks manage their liquid assets well to satisfy customers' demands for cash.

The study also concurs with Wuave, Yua and Yua (2020) who examine the effect of liquidity management on financial performance of banks in Nigeria for the period 2010 to 2018. The study uses secondary data from five banks listed bank on the stock exchange in Nigeria. The study uses panel regression analysis in estimating the model and Hausman test while making a choice between fixed effect and random effect model. The study finds that liquidity ratio have positive and significant effect on financial performance of banks as measured by ROA, ROE and net interest margin.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The facts, conclusions, as well as limitations discovered during the research are summarized in this chapter. It also makes policy recommendations that will help policymakers raise the expectations of publicly traded non-financial companies in order to attain better results. The findings of the research too include future research suggestions.

5.2 Summary of Findings

The research's goal was to see how NSE's financial performance is affected by liquidity management. Liquidity management, financial leverage and business size were among the variables studied. This was accomplished using a descriptive cross-section design. SPSS has been used to analyze secondary CMA data. Annual data for 42 non-financial corporations has been obtained during a 5-year period from their annual reports.

The correlation coefficient of Pearson showed that liquidity management has a significant positive association with financial performance while financial leverage has a significant negative association with performance measured by ROA. The research too exhibited that the correlation between firm size and the success of NSE non-financial companies has been positive but not substantial.

As depicted by 0.292 R square, indicating that changes in liquidity management, financial leverage and business size account for 29.2 % of the variance in NSE listed non-financial enterprises performance. 70.8% of financial performance variation is attributable to variables outside the model. The results showed that the predictor

parameters selected were significantly linked with the business results of non-financial companies (R=0.541). The F value was calculated as 5% above the crucial value whereas the p value was 0.000 and showed that the model included data on the effects of the three independent variables on NSE power and animals.

The regression outcomes suggest that performance would be -0.176 if the variables (Liquidity management, financial leverage and company size) were all zero. While firm size was insignificant, a unit rise in financial leverage resulted in a 0.257 decline in performance, but a unit rise in liquidity management resulted in 0.232 increase in financial performance.

5.3 Conclusion

The financial performance of publicly traded non-financial businesses is affected significantly by liquidity management. The conclusions designate that a one-unit increase in that variable has a substantial positive effect on non-financial business performance. Financial leverage has a strong negative influence on performance. Further, business size has a favorable but modest financial impact, meaning that corporate size is not a substantial predictor of firm size.

The results indicate that the selected factors, such as liquidity management, financial leverage and size significantly affected businesses' success. These factors influence significantly on non-financial companies' financial performance, since ANOVA's p value is below 0.05. The finding that the chosen variables account for 29.2% of variance in performance indicates that other non-model factors account for 70.8% of variance in non-financial companies' financial performance.

This study concurs with Kyalo (2017) who researched the liquidity management influence on deposit taking SACCOs' financial performance in Kenya. The research used 27 deposit taking SACCOs as the research population in gathering secondary data covering the years 2010-2014. Regression analysis models formed the basis of data analysis and interpretation. The outcomes recorded financial performance positively correlates to liquidity, funding risk of liquidity, efficiency of operations, log of assets and quick ratio.

This study also agrees with Njue (2020) who investigated the effect of liquidity management on the financial performance of MFI's in Kenya. Secondary data from 2012 to 2016 on the study variables were deduced from the audited financial statements of the MFIs under consideration. The desired population of the research consisted of all the twenty-six MFIs in Kenya that were members of AMFI and available at the CBK website. The study used both descriptive and inferential statistics to evaluate the data. The analysed data indicated that liquidity management practices fundamentally influenced the financial performance of MFIs in Kenya.

5.4 Recommendations for Policy and Practice

Financial performance and liquidity management were found to have a positive relationship in the research. The suggestion is that a detailed examination of the liquidity condition of publicly traded non-financial firms be performed to ensure that the firms are functioning at adequate levels of liquidity, consequently boosting financial performance. The rationale for this is that liquidness is extremely vital since it has an impact on how a company operates.

The study results revealed that financial leverage has a negative impact on financial performance. Policy reforms include: non-financial companies listed in NSE shall

assess fiscal advantages and bankruptcy costs connected with loan funding. Levels of debt should be kept at appropriate levels because a high debt level has been shown to decrease financial performance. This will assist in achieving the objective of enhancing shareholder value.

5.5 Limitations of the Study

The research looked at some of the elements thought to affect the NSE-listed non-financial companies' performance. The research focused on three explanatory variables in particular. Nevertheless, additional factors, some of which are internal, like the firm's age and corporate governance, though others which lack management's regulation, like rate of exchange, economic growth, balance of trade, as well as rate of unemployment, are influential in determining financial performance of companies.

The research used quantitative secondary data. The research also overlooked qualitative data that may explain additional variables influencing the connection between liquidity management and non-financial company performance. Qualitative techniques like focus groups, open surveys and interviews may help to provide more definitive results.

The research focused on a span of 5 years (2016 to 2020). It is not clear whether the outcomes will last longer. It is also uncertain if same results can be expected beyond 2020. A multivariate linear regression model for data analysis was used. The investigator cannot correctly extrapolate results due to the model's shortcomings, such as misleading conclusions from a change in variable financial performance. When data is added into the model, conflicting outcomes may occur.

5.6 Suggestions for Further Research

The research uses secondary data to examine at the impact of the liquidity management on NSE non-financial firms' performance. In order to complement this research, same

survey on the basis of primary data obtained through thorough surveys as well as interviews on all 42 NSE listed non-financial corporations might suffice.

Further research on variables such as growth prospects, industrial practices, business age, political stability, and other macroeconomic variables is required since the study did not cover all of the elements that affect the financial performance of NSE non-financial companies. Policymakers may use a tool that evaluates the influence of different factors on performance to help them make decisions.

The research was restricted to NSE-listed non-financial businesses. Other corporations operational in Kenya should be investigated further, according to the study's recommendations. Future research should look into how liquidity management affects characteristics other than financial performance, such as business value, operational efficiency, and dividend payment, to name a few.

The focus of this research was drawn to the last five years. Future studies may span a lengthy period of time, such as thirty or twenty years, and may have a major effect on this study by confirming or refuting its findings. A longer research has the benefit of allowing the researcher to catch the effects of business cycles like booms as well as recessions.

Lastly, this research relied on model of multiple linear regression, that has its own set of drawbacks, including the possibility of erroneous and misleading conclusions due to changes in variable financial performance. To explore the many connections to financial success, future research should use alternative models, such as the Vector Error Correction Model.

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APPENDICES

Appendix I: Non-Financial Firms Listed at the NSE

	COMPANY	SECTOR	YEAR OF LISTING
	Deacons (East Africa)	Consumer Services	2016
2.	Nairobi Business Ventures	Consumer Services	2016
3.	Atlas African Industries	Industrials	2014
4.	Flame Tree Group Holdings	Basic Materials	2014
5.	Kurwitu Ventures	Consumer services	2014
6.	Umeme	Utilities	2012
7.	TransCentury	Industrials	2011
8.	Safaricom	Telecommunications	2008
9.	Eveready East Africa	Consumer Goods	2006
10.	KenGen Company	Utilities	2006
11.	WPP Scangroup	Consumer Services	2006
12.	Mumias Sugar Co	Consumer Goods	2001
13.	ARM Cement	Industrials	1997
14.	TPS Eastern Africa	Consumer Services	1997
15.	Kenya Airways	Consumer Services	1996
16.	Sameer Africa	Consumer Goods	1994
17.	Longhorn Publishers	Consumer Services	1993
18.	Crown Paints Kenya	Basic Materials	1992
19.	Uchumi Supermarkets	Consumer Services	1992
20.	Total Kenya	Oil & Gas	1988
21.	Express Kenya	Consumer Services	1978
22.	Olympia Capital Holdings	Industrials	1974
23.	East African Cables	Industrials	1973
24.	Nation Media Group	Consumer Services	1973
25.	Carbacid Investments	Basic Materials	1972
26.	Eaagads	Consumer Goods	1972
27.	East African Breweries	Consumer Goods	1972
28.	East African Portland Cement	Industrials	1972
29.	Kapchorua Tea Kenya	Consumer Goods	1972
30.	Kenya Power & Lighting	Utilities	1972
31.	Williamson Tea Kenya	Consumer Goods	1972
32.	Unga Group	Consumer Goods	1971
33.	Bamburi Cement	Industrials	1970
34.	B O C Kenya	Basic Materials	1969
35.	BAT Kenya	Consumer Goods	1969
36.	Limuru Tea	Consumer Goods	1967

37.	Sasini	Consumer Goods	1965
38.	KenolKobil	Oil & Gas	1959
39.	Kenya Orchards	Consumer Goods	1959
40.	Standard Group	Consumer Services	1954
41.	Kakuzi	Consumer Goods	1951
42.	Car & General (K)	Consumer Services	1940

Source: NSE (2020)

Appendix II: Research Data

Company ID	Year	ROA	Liquidity Management	Financial Leverage	Firm size
1	2016	-0.1600	3.9703	0.513	10.630
1	2017	-0.0600	3.9512	0.456	10.708
1	2018	0.1500	3.9318	0.676	10.715
1	2019	0.0400	3.9120	0.745	10.567
1	2020	0.0500	3.8918	0.723	10.473
2	2016	0.1400	3.9120	0.274	10.660
2	2017	0.1500	3.8918	0.325	10.528
2	2018	0.1200	3.8712	0.289	10.622
2	2019	0.0900	3.8501	0.295	10.603
2	2020	0.1100	3.8286	0.275	10.634
3	2016	0.0100	4.3944	0.643	9.973
3	2017	0.0200	4.3820	0.666	9.987
3	2018	0.0200	4.3694	0.664	9.954
3	2019	0.0400	4.3567	0.653	9.911
3	2020	0.0600	4.3438	0.637	9.839
4	2016	0.1300	3.1781	0.116	9.519
4	2017	0.1200	3.1355	0.132	9.489
4	2018	0.1300	3.0910	0.166	9.473
4	2019	0.1700	3.0445	0.147	9.404
4	2020	0.2200	2.9957	0.127	9.343
5	2016	0.0400	2.0794	0.701	9.769
5	2017	0.0500	1.9459	0.691	9.704
5	2018	0.0100	1.7918	0.702	9.657
5	2019	0.0100	1.6094	0.650	9.586
5	2020	0.0700	1.3863	0.538	9.469
6	2016	-0.1000	3.5835	0.733	9.847
6	2017	-0.0800	3.5553	0.661	9.878
6	2018	0.0200	3.5264	0.595	9.923
6	2019	0.3900	3.4965	0.608	9.897
6	2020	0.0600	3.4657	0.550	9.833
7	2016	-0.0400	3.9703	0.383	10.437
7	2017	0.1500	3.9512	0.355	10.445
7	2018	0.3100	3.9318	0.403	10.364
7	2019	-0.0200	3.9120	0.573	10.196
7	2020	0.1100	3.8918	0.561	10.208
8	2016	0.3500	3.9120	0.289	8.888
8	2017	-0.1800	3.8918	0.551	9.035
8	2018	0.3900	3.8712	0.431	9.179
8	2019	-0.1900	3.8501	0.765	8.969

Company ID	Year	ROA	Liquidity Management	Financial Leverage	Firm size
8	2020	0.0500	3.8286	0.580	8.973
9	2016	0.1000	4.3944	0.248	9.759
9	2017	0.1100	4.3820	0.241	9.705
9	2018	0.1200	4.3694	0.358	9.481
9	2019	0.0400	4.3567	0.228	9.586
9	2020	0.0500	4.3438	0.221	9.570
10	2016	0.0200	3.1781	0.514	11.577
10	2017	0.0200	3.1355	0.530	11.565
10	2018	0.1900	3.0910	0.587	11.535
10	2019	0.0200	3.0445	0.693	11.398
10	2020	0.0300	2.9957	0.607	11.276
11	2016	0.0900	2.0794	0.535	10.382
11	2017	0.0900	1.9459	0.592	10.384
11	2018	0.1000	1.7918	0.508	10.240
11	2019	0.0400	1.6094	0.693	10.379
11	2020	0.0200	1.3863	0.763	10.449
12	2016	0.0200	2.3571	0.795	11.534
12	2017	0.0200	2.2968	0.785	11.474
12	2018	0.0300	2.6813	0.697	11.440
12	2019	0.0400	2.3480	0.668	11.344
12	2020	0.0300	2.6204	0.683	11.248
13	2016	-0.0600	1.3164	1.307	11.165
13	2017	-0.1900	1.1960	1.229	11.192
13	2018	-0.1900	1.1739	1.033	11.260
13	2019	-0.0200	1.2056	0.810	11.172
13	2020	-0.0400	1.2276	0.746	11.089
14	2016	0.3000	1.0562	0.156	11.209
14	2017	0.2400	1.0962	0.174	11.202
14	2018	0.2000	1.1120	0.336	11.196
14	2019	0.1700	1.1601	0.322	11.129
14	2020	0.1400	1.1233	0.377	11.110
15	2016	0.0000	4.5106	0.393	9.473
15	2017	-0.2000	6.2963	0.444	9.517
15	2018	-0.0100	10.0893	0.384	9.574
15	2019	-0.0200	4.2579	0.328	9.586
15	2020	0.1200	8.8431	0.270	9.564
16	2016	0.0200	1.1065	0.142	10.120
16	2017	0.0300	1.1464	0.104	10.226
16	2018	0.1300	1.3815	0.090	10.205
16	2019	0.3800	1.5359	0.188	10.174

Company ID	Year	ROA	Liquidity Management	Financial Leverage	Firm size
16	2020	0.0100	1.4639	0.295	9.957
17	2016	-0.0500	1.2832	0.582	9.649
17	2017	0.0500	1.1679	0.529	9.644
17	2018	-0.0700	1.3048	0.569	9.639
17	2019	0.0500	1.1971	0.462	9.613
17	2020	0.0500	1.1606	0.507	9.619
18	2016	0.0700	1.5853	0.437	10.580
18	2017	0.0600	0.9464	0.465	10.559
18	2018	0.0500	1.0851	0.486	10.534
18	2019	0.0400	1.0237	0.495	10.512
18	2020	0.0300	1.4691	0.615	10.602
19	2016	-0.2100	0.9836	1.006	10.273
19	2017	-0.0500	1.3339	0.797	10.277
19	2018	-0.0500	1.5404	0.966	10.277
19	2019	-0.0800	1.2591	0.366	10.339
19	2020	0.0300	1.1154	0.446	10.377
20	2016	-0.5700	4.1442	1.419	9.699
20	2017	-0.5300	7.9538	0.867	9.807
20	2018	0.0800	8.4745	0.520	9.838
20	2019	0.0600	3.3451	0.475	9.746
20	2020	0.0000	0.9506	0.466	10.011
21	2016	0.0600	1.0966	0.381	9.964
21	2017	0.0700	1.4218	0.383	9.938
21	2018	0.0600	1.4858	0.394	9.905
21	2019	0.0400	1.7358	0.471	9.909
21	2020	0.1200	1.2374	0.279	10.054
22	2016	0.1300	0.9502	0.285	10.085
22	2017	0.1600	0.9346	0.295	10.104
22	2018	0.2000	0.9684	0.266	10.077
22	2019	0.2300	1.2242	0.280	10.059
22	2020	0.0200	1.6434	0.277	9.348
23	2016	0.0600	1.0320	0.240	9.347
23	2017	0.0600	0.9226	0.261	9.366
23	2018	0.1000	0.8973	0.240	9.362
23	2019	0.0800	1.1574	0.216	9.420
23	2020	0.1200	0.5021	0.820	10.824
24	2016	0.1600	0.4648	0.888	10.791
24	2017	0.1400	0.5627	0.801	10.826
24	2018	0.1100	1.4005	0.855	10.798
24	2019	0.1100	1.0634	0.868	10.761

Company ID	Year	ROA	Liquidity Management	Financial Leverage	Firm size
24	2020	0.1700	0.6245	0.078	8.965
25	2016	0.0500	0.7402	0.091	8.881
25	2017	0.0100	0.6930	0.148	8.633
25	2018	-0.0900	0.5634	0.191	8.649
25	2019	0.1000	0.6361	0.239	9.978
25	2020	-0.0300	2.2050	0.265	9.922
26	2016	0.0500	2.5238	0.221	9.951
26	2017	0.0100	3.3740	0.229	9.932
26	2018	0.0900	2.8332	0.253	9.931
26	2019	-0.0300	3.0200	0.303	9.308
26	2020	0.0500	4.4016	0.294	9.331
27	2016	-0.0100	2.3280	0.280	9.297
27	2017	0.0700	1.7710	0.284	9.285
27	2018	0.0900	1.8952	0.382	9.318
27	2019	-0.0700	2.1309	0.283	8.418
27	2020	-0.0800	0.9554	0.271	8.451
28	2016	0.0100	1.2192	0.267	8.497
28	2017	0.0000	1.1561	0.236	8.530
28	2018	0.0800	1.1158	0.241	8.535
28	2019	-0.0700	1.0780	1.139	8.574
28	2020	-0.2500	1.5236	0.939	8.579
29	2016	-0.1400	1.4882	0.728	8.645
29	2017	-0.1600	1.2774	0.673	8.679
29	2018	0.0000	1.2997	0.587	8.682
29	2019	0.0100	1.1003	0.476	10.243
29	2020	0.0000	0.6298	0.437	10.230
30	2016	-0.0300	1.5950	0.388	10.199
30	2017	0.0100	1.4871	0.347	10.202
30	2018	0.0300	1.2846	0.346	10.208
30	2019	0.0400	1.4099	0.348	10.139
30	2020	0.0300	0.3431	0.347	10.130
31	2016	0.0200	0.6717	0.310	10.096
31	2017	0.0400	0.7048	0.357	10.123
31	2018	0.0600	1.0983	0.369	10.105
31	2019	-0.2300	1.0861	0.683	8.157
31	2020	0.0300	2.3685	0.679	8.191
32	2016	0.0300	2.2713	0.594	8.048
32	2017	0.1000	1.8378	0.763	7.900
32	2018	0.0300	2.3583	0.754	7.654
32	2019	-0.0400	2.5221	1.087	9.651

Company ID	Year	ROA	Liquidity Management	Financial Leverage	Firm size
32	2020	-0.0400	1.3097	1.053	9.594
33	2016	-0.1000	1.1747	1.011	9.587
33	2017	0.0000	1.1699	0.906	9.570
33	2018	0.0300	1.1666	0.889	9.486
33	2019	-0.0800	1.1380	0.530	8.147
33	2020	-0.0300	0.4479	0.526	8.708
34	2016	0.0000	1.0423	0.537	8.781
34	2017	0.0000	1.0590	0.452	8.712
34	2018	-0.1100	1.1121	0.403	8.109
34	2019	0.1000	1.1251	0.046	9.324
34	2020	0.0900	1.0611	0.075	9.304
35	2016	0.1600	1.1587	0.075	9.283
35	2017	0.1900	1.1441	0.084	9.227
35	2018	0.2300	1.1447	0.364	9.060
35	2019	0.1900	1.0939	0.560	10.251
35	2020	0.2600	1.0332	0.524	10.267
36	2016	0.2700	1.2705	0.526	10.271
36	2017	0.2300	1.2776	0.555	10.261
36	2018	0.2200	1.1715	0.025	10.230
36	2019	0.0600	1.1658	0.718	10.428
36	2020	-0.2300	1.5334	0.710	10.310
37	2016	-0.1200	1.6234	0.636	10.372
37	2017	-0.0500	1.6385	0.567	10.436
37	2018	0.0600	1.6048	0.491	9.269
37	2019	0.0500	1.5050	0.492	9.271
37	2020	0.0900	1.2653	0.448	8.838
38	2016	0.1300	1.2875	0.423	8.877
38	2017	0.1700	1.2781	0.437	8.836
38	2018	-0.1200	1.2225	0.486	9.358
38	2019	0.0400	1.1691	0.392	9.396
38	2020	0.0300	1.1254	0.280	9.293
39	2016	-0.0400	1.0996	0.530	8.741
39	2017	0.0498	1.0417	0.468	8.267
39	2018	0.0389	1.2396	0.450	8.316
39	2019	0.0387	2.2624	0.442	8.354
39	2020	0.0360	2.9326	0.341	8.382
40	2016	0.0284	3.5336	0.283	8.414
40	2017	0.0498	2.5000	0.400	8.267
40	2018	0.0389	3.1447	0.318	8.316
40	2019	0.0387	2.5063	0.399	8.354

Company ID	Year	ROA	Liquidity Management	Financial Leverage	Firm size
40	2020	0.0360	2.5000	0.400	8.382
41	2016	0.0284	2.9851	0.335	8.414
41	2017	0.0449	3.0675	0.326	8.291
41	2018	0.0446	2.9586	0.338	8.343
41	2019	0.0471	2.6596	0.376	8.347
41	2020	0.0278	2.9674	0.337	8.369
42	2016	0.0374	2.1739	0.460	8.399
42	2017	0.0417	1.4728	0.679	8.035
42	2018	0.0414	2.4155	0.414	8.083
42	2019	0.0427	1.3569	0.737	8.164
42	2020	0.0386	1.8315	0.546	8.219