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LIQUIDITY MANAGEMENT POLICY AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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ABSTRACT

The primary goal of the study was to ascertain how Kenyan commercial banks' financial performance was impacted by their liquidity management policies. Agency Theory, Liquidity Preference Model, Miller-Orr Model, and Shift Ability Theory all provided support for the research. A causal research design was adopted. The study's target population comprised 43 commercial banks, and therefore a census technique of sampling was adopted. Panel data for five years, between 2015 and 2019 were collected using the data review guide. All ethical considerations from the respective institutions and authorities regarding this study were adhered to. A multiple-panel regression model was adopted to analyze the study data. Results of the study showed that liquidity management policy had a big impact on how well Kenyan commercial banks were doing financially. Cash management policy, Credit management policy, Investment management policy, and Liquid assets Holdings all had a positive and significant influence on the banks' ROE. All the study null hypotheses were therefore rejected. Consequently, the study concluded that the financial performance of commercial banks was significantly impacted favorably by the holdings of liquid assets, cash management practices, credit management practices, and investment management practices. This study, therefore, recommended a careful estimation of the most suitable amount of liquid assets holdings to be maintained by the bank at any given time to bring the required profit levels. In addition, banks were recommended to maintain moderate amounts of liquid cash of up to twenty percent to allow them to execute their day-to-day events. More attention should also be paid to the type of assets banks invest their funds in, as an increase in investment in suitable assets increases the banks' financial performance. Furthermore, the banks' management should carefully balance the proportion of their deposits that they invest in other securities. Furthermore, based on the study findings, the Credit management policy was found to cause the most substantial impact on the banks' ROE. Consequently, this study recommended more attention and caution on this policy by both the regulatory authority and the financial institutions themselves to achieve the required levels of profit margins at the same time.

Key Words: *Liquidity Ratio,Cash Management Policy, Credit Management Policy, Liquid Assets Holdings*

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INTRODUCTION

In the modern, competitive, and growing global, the banking industry has arose as a key contributor to the expansion of the economy, the economic sector, and most pointedly, the formation of jobs prospects in the state. The fulcrum of the monetary system is the banking industry, any economy, and it has a noteworthy part in fostering the expansion of a state's economy (Pokharel, 2019). The collection of excess funds through public customer deposits in order to meet the demands of its customers and cover deficit units, (often referred to as financial intermediary), is one of the banks' primary functions (Macharia, 2016).

In order to satisfy existing duties for businesses without suffering losses or disruptions, Shafana, (2015) as shown by Samuel, (2017) states that banks must maintain a suitable capacity, One of the management's financial considerations should be to prioritize liquidity. Investing in cash and securities is referred to as a bank's liquidity, according to (Marozva 2015), the bank's capability to translate convert a resource into cash and then proceed with bank loans. Any unsecured financial obligation with a one-year maturation dates must be covered by liquidity. In terms of banks, the capacity of the bank to continue liquidity to compensate its debts as they become payable. Bond payments, client deposits, check clearing fees, loan payments, and satisfying loan demand are a few examples of this, (Zimon, 2020).

Bischof, J., Rudolf, N., & Elfers, F. (2020) in their book entitled Greater bank transparency: A The importance of the government's engagement in the banks' liquidity management is covered in Top-Down Approach. The following factors can be used to analyze the banks' liquidity notwithstanding the various approaches that may be utilized to do so: holdings of liquid assets, a cash management strategy, a credit strategy, and an investment strategy, and how rapidly they may be changed to cover reclamations.

As stated by the CBK supervisory report (2018), the Kenyan Central Bank made up the majority of the banking industry as of December 2018 (the regulating body) and 43 financial institutions (Fourty-two banks of commerce and one mortgage financing firm) 40 of the banks were individually owned, and the remaining three banks in which the Kenyan government held a dominant stake. Among the 40 independent banks, 25 were locally maintained, and the remaining 15 belonged to foreigners. 24 of the 25 locally held businesses were commercial banks and one mortgage company. Including 12 local subsidiaries and 3 foreign bank branches, all 15 foreign-owned banks were commercial banks.

The CBK Supervision report (2019) claims that , as of December 2018, Kenya's finance industry had a total net worth of KES 4.4 trillion. 3 local state banks and 22 local private banks were involved, 63.8% and 3.2%, respectively, of total net assets were represented by these. There were 15 international banks, accounting for 33.0% of the net possessions of the banking system. According to CBK (2018), 2018 saw 1,505 branches compared to 1,518 branches the year before, the banks' total number of divisions in the nation decreased by 13 branches. According to the CBK Report 2018, of the 47 counties, Although 9 counties experienced a decline of 25 branches, The number of bank branches increased by 12 in 10 counties, with Nairobi County recording the largest (11) decrease in bank branches. On the other hand, the 28 remaining counties saw a zero (no change) expansion in how many bank branches there are. The reduction of the banks' physical branches is explained by the banking industry's adoption of technologies including agency banking, online banking, and mobile in service delivery.

In line with Guruswamy (2012), the bank's success or failure affects its capacity to boost capital (by means of retained incomes), encourage increase of future assets, absorb credit loses and offer investors with a return. In this analysis, financial performance was taken into consideration. The Return on Assets (ROA), Return on Equity (ROE) (ROA), Operational Profit (OP) and the proportion

of overall assets to net interest margin (NIM), important ratios are to evaluate a bank's performance. Financial performance and liquidity trade-off must be constantly monitored by banks as they carry out their financial intermediation duties.

Statement of the Problem

Kenya's financial sector has witnessed some significant deviations over the past ten years (World Bank Report, 2019). Although some banks have benefited from the transformation, many commercial Banks have encountered challenges in remaining competitive and maintaining their day-to-day operations. The return on equity for commercial banks has been on a constant declining trend since 2013, according to the CBK Supervision Report, 2018, sending a negative message to the economy and investors. Due to liquidity problems, this also resulted in the receivership of other banks, including Chase Bank, Imperial Bank, and Dubai Bank (CBK, 2016). Moreover, Kenya Commercial Bank Ltd acquired the National Bank of Kenya in 2019.

For banks to continue to exist and continue operating in the very dynamic and competitive economic environment, it is crucial that they understand their internal elements, particularly liquidity management. According to Myers and Majluf (2004), the management of banks must establish comprehensive financial rules and regulations for the management of liquid assets to prevent avoidable liquidity risks that the bank can encounter. On the subject, certain local and international studies have been conducted in various nations, and few of them have demonstrated some contrasting results.

Fuertes, Osborne, and Milne (2012) found that banks with advanced liquidity reported lower profitability due to the high expenses of maintaining the liquid resources. The trade-off argument, which contends that high liquidity lowers a bank's profitability, was supported by this, and therefore a hedge will be advised in the event of bankruptcy so that the investors can be paid back. Muriithi (2016) asserts that any Kenyan commercial bank's level of liquidity adoption will have a bearing on the success of the banks and, consequently, the banks' profitability, affected significantly utilizing the liquidity management strategies and policies used by the banks.

The aforementioned studies obviously present a range of results, some of which appear having been conducted a very long time ago and cannot be utilized to produce educated conclusions about the constantly changing and fiercely competing banking sector. Studies by Sile, Olweny, and Sakwa (2019), Obim, Takon, and Mgbado (2020), and Maina (2017) used ROA as a performance measure, likely, as a way of evaluating the performance of commercial banks, Muiruri (2017), Samual (2017), and Okello (2021) are all seen to have implemented ROA. In order to close the objective of the current investigation was to to resolve the conflicts and use ROE as the performance indicator for these institutions.

Objectives of the Study

The General Objective of the study was to determine the effect of liquidity management policy on the performance of Commercial banks in Kenya. The specific objectives were;

- To establish the effect of liquid assets holdings on the performance of Commercial Banks in Kenya
- To determine the effect of cash management policy on the performance of Commercial Banks in Kenya
- To assess the effect of Credit management policy on the performance of Commercial Banks in Kenya
- To establish the effect of investment management policy on the performance of Commercial Banks in Kenya.

The research was guided by the following hypothesis were;

- H_{01}: Liquid assets holdings have no significant effect on the financial performance of Commercial Banks in Kenya

- H_{02}: Cash management policy has no significant effect on the financial performance of Commercial Banks in Kenya
- H_{03}: Credit management policy has no significant effect on the financial performance of Commercial Banks in Kenya
- H_{04}: Investment management policy has no significant effect on the financial performance of Commercial Banks in Kenya.

LITERATURE REVIEW

Theoretical Review

Agency Theory

Agency theory was settled in 1976 by Jensen and Meckling. The investigates the connection between a principal (like a shareholder or a bondholder) and an agent (such as a manager or a corporate board of directors) and how these two parties' interests may not be in harmony, (Mitnick, 2015). The two proponents pointed out that there is typically an agency affiliation between two sides in enterprises and organizations.; the owner and representative. In this relationship, the organization's owner (principal) delegated full control of the company's administration and output of every moneymaking transaction within the organization on their behalf for a cost. Moreover, Jensen and Meckling (1976) contend that such relationships may result in conflicts of interest and thus it is necessary to put in place suitable safeguards to protect the principal's and agent's mutual interests. Goebel (2019) further states that so as to guard the welfares of the parties, they must enter into a comprehensive (all-inclusive) agreement or contract. To secure the protection of his or her interests, the principal may also recruit outside experts.

This theory applies to this research since it supports the study's dependent variable (performance - ROE). The bank's management has been given the power to conduct bank business and oversee shareholder funds in order to enhance shareholder value. In this instance, the banks' performance has consistently declined over the past few years, pointing to ineffective management of the bank's capitals and a resulting of competing interests.

Liquidity Preference Theory

The Liquidity Preference Theory, advanced by Keynes in 1936, acknowledges the existence of long-term and short-term securities as the two categories. According to Keynes' Theory, depositors would always be content with a lower interest rate for short-term securities and a premium for long-term securitiesThis is because long-term securities have a significant level of risk. As a result, investors will typically favor short-term assets that are easily convertible into liquid cash, (Conard, 2021).

In his theory, Keynes distinguishes between three reasons for hanging onto money: transaction, cautionary, and notional demand. When people need money to conduct daily activities, this is known as a transaction demand, (Bibow, 2013). Those who desire to hold onto their money in case of unanticipated uncertainties are said to be in a precautionary demand. Last but not least, speculative demand postulates that people hold or desire liquid money in order to profit from market asset values, (Lavoie & Reissl, 2019). This theory attempts to shed further light on the justifications on why banks choose to keep a particular liquid asset level, which is relevant to this study. Cash Management Policy, Investment Management Policy, Liquid Asset Holdings, and Credit Management Policy are thus supported by the idea.

Miller-Orr Model

The Miller-Orr model, projected by Miller and Orr in 1966, aims to address the shortcoming of the Baumol model for managing cash. The Miller-Orr model acknowledges that a business's daily flow of money are in fact uncertain and occasionally fluctuate, contrary to the Baumol model's assumption that a firm's cash flow is constant makes the assumption that the cash flow is stochastic because the firm makes cash payments of various amounts at various times. The Miller-Orr model has been used to demonstrate how businesses can use their cash levels to enhance

their liquidity, or their capacity to pay their debts as they become due, (Mache & Omodero, 2021).

The approach suggests that businesses should permit their cash balance to fluctuate or change within two predetermined boundaries (upper and lower limits). To keep the cash balance within the required limitations, the company will buy or sell marketable securities. The model makes a number of assumptions, including that cash flows have a normal distribution and that the average distribution of net cash flows is zero, (Tonapa & Tomu, 2019). The model also predicts that companies with greater liquidity will be better equipped to survive sudden shocks or economic downturns, protecting their assets and preserving the trust of their creditors and shareholders.

Shift ability Theory

Moulton proposed the Shiftability theory (1918). According to the notion, businesses can maintain the necessary levels of liquidity by maintaining marketable assets that can be sold or exchanged (shifted) for money. Moulton continues by saying that companies don't need maturing invoices to reach the minimal reserve requirements, and is still in a position to achieve this by holding onto a number of marketable assets that the business may simply transfer to other businesses. Maaka (2013) notes that marketable securities are viewed by the Theory considered one of the crucial banks' liquidity sources during times of crisis. The world financial crisis of 2007–2008 made clear the underlying liquidity issues that banks were dealing with in the market between banks.

This Theory is extremely important regarding this investigation since it supports its independent variables, namely the holdings of liquid assets, cash management policies, and investment management policies. In order to better control their liquidity levels at any time, banks will be in a stronger position if they possess marketable assets and securities like treasury bills, debentures, and shares. Critics of this approach, however, contend that it misses circumstances like extreme depression, in which shares and debentures may not be readily transferred to other market participants.

Empirical Literature Review

Liquid Assets Holdings and Performance

Olweny, Sakwa, and Sile (2019), studied Liquidity as a factor in the financial success of Long-term investments yield greater profits than short-term assets, according to moneymaking banks. The investigation made use of secondary data from the banks' publicly available monetary records for the years from 2012 to 2016. Although cash and cash equivalents were used to gauge liquidity, ROA was used to measure success. According to the study's findings, the banks' liquidity management and monetary performance are negatively correlated. To increase the banks' profitability, the study suggested striking an equilibrium balance short-range (liquid) and long-standing (liquid) assets. In addition, the report suggests maintaining the CBK's liquidity standards to improve the stability of the banks. The present study, however, represented liquidity as measured by cash management policies, investment policies, credit management policies, and liquidity asset holdings, whereas success was measured according to ROE.

Muiruri (2017), researched the relationship between Kenyan commercial banks' profitability and liquidity, considering all 43 commercial banks as the target market. The study employed many methods to gauge the banks' liquidity; In contrast, ROA served as the foundation for determining how profitable a bank was, together with the deposit asset ratio, liquidity ratio, and capital ratio. For the years between 2011 and 2016, secondary data was gathered and examined using the regression methodology. The discoveries discovered a substantial and favorable the connection between Kenyan commercial banks' profitability and liquidity ratio, so urging the CBK to keep the liquidity requirement in place.

Cash management policy and Performance

Maaka (2013) pursued to determine how liquidity issues affect Kenya's commercial bank's success or

failure.The study's sample included 14 commercial banks. Data from the banks were used in the study and they were publicly available statements of financial position for the years 2008 to 2012, mostly from the institutions', Capital Market Authority's, and NSE's official websites. The bank's performance was assessed using profit before taxes (dependent variable), while liquidity was measured using cash, deposits, non-performing loans, and liquidity gap (independent variable). Indicated by the study's findings, evaded loans meaningfully impacted the efficiency of banks. All 43 Kenyan banks were considered in the current study, and data from their five-year public statements were collected and analyzed (2015 - 2019).

Maina (2019) examined the accomplishments of Kenyan banks business sector that are registered on the Nairobi Stock Exchange (NSE). Asset quality, net loan holdings, and holdings of liquid assets were the study's independent variables, while the banks' profitability was its dependent variable. The outcomes of the investigation show, the cost-effectiveness of banks was negatively impacted by holdings of liquid assets, net loan holdings, and asset quality. According to the survey, most banks had a sizable amount of long-term debts representing a portion of their assets, which had an adverse effect on their earnings. All 43 moneymaking banks doing business in Kenya were the subject of the current investigation.

Muthoni (2015) sought to determine how solvency and liquidity impacted Kenyan commercial banks' profitability. The the absence of liquidity in a bank's financial statement condition is one of the indicators of liquidity issues, according to the research. Using a descriptive research design, 43 banks that were in business were the focus. The results of the investigation showed that liquid assets and solvency had a detrimental and little consequence on the functioning of banks. In addition, a insignificant and negligible association was found in the analysis of banks' performance and asset quality. The study's final assumption was that the performance of the banks was unaffected by liquidity or solvency. Thus, ROE was used to measure financial success while liquidity is defined by the policies for managing cash, investments, credit, and holdings of liquid assets in the present study.

Credit management policy and Performance

(Omondi, 2019) operationalized financial hazards into different types of risk to better understand Kenyan commercial banks' financial results and the effects of financial hazards.; Hazards related to credit, foreign exchange, interest rates, liquidity, and credit. In order to assess the banks' financial performance between 2013 and 2017, the ROE was adopted. The 42 moneymaking banks were the subject of the investigation and used a causal research approach. STATA version 14 was used to collect and analyze panel data. The outcomes demonstrated that the banks' performance was significantly impacted negatively by credit risk, whereas connection between liquidity risk and the banks' fiscal performance was minimal and favorable. Omondi (2019) asserts that banks should increase performance by making sure that restrictive covenants are carefully followed and that consumers are thoroughly vetted before making loans. The study's measurements of liquidity and success were cash and cash equivalents as well as ROA.

In Tanzania, a research by Lyambiko (2015) scrutinized the affiliation between commercial banks' fiscal health and asset value. The study's precise goals were to determine how operational effectiveness, credit risk, and bankruptcy risk affected the state of banks' finances. Information was gathered from a sample of 36 banks that were used for the investigation that are active in Tanzania (from 2009 to 2013 (a five-year span). The discoveries showed that the success of the banks was critically influenced by asset value of the banks (ROA).

Abdulkadir (2017) explored the bearing of business size, capital allocation, liquidity, and leverage on the monetary results of non-monetary enterprises listed on the NSE, Kenya. Secondary information

was gathered for the years 2009 through 2013. According to the study's findings, control and liquidity had a favorable bearing on the business success of registered firms that are not financial at the Kenyan stock exchange, or NSE. Accounts payables and receivables were seen in particular in order to improve business performance. While the previous study focus on non-financial firms, this research focussed on financial institutions, particularly all Kenyan commercial banks.

Investment management policy and Performance

Marozva (2015), analyzed the connection between South African banks' success and liquidity. The study considered 16 years (1998 to 2014) and used the Autoregressive Distributed Lag and Ordinary Least Square models for data analysis. Asset quality was one of the study's independent variables, and the results discovered that it had a considerable impact on the Net Interest Margin. The current analysis expressed the banks' performance in terms of ROE and mostly focused on Kenyan banks.

Akhter (2018), aimed to scrutinize the bearing of profitability and liquidity on Bangladesh's chosen moneymaking banks' operational effectiveness: panel data analysis. The research used secondary data from monetary declarations from 30 chosen banks between 2011 and 2016. In order to examine the data, the study used models such as the Feasible Generalized Least Squares model and the Fixed Effect Regression with Panel Correlated Standard Error Model. The study's conclusions showed that the banks' liquidity explained more of their operational efficiency than the average. The study ultimately came to the conclusion that in order to increase bank profitability, banks required to properly utilize their assets and maintain high-quality loan portfolios.

Maina (2017), examined the connection between Kenyan commercial banks' profitability and liquidity. Descriptive research methods were employed in the study with a specific objective of assessing the bearing of liquidity and capital sufficiency on the ROA of these banks. To ascertain the link between the study's factors, the study gathered and examined secondary data gathered between the years of 2012 and 2016. All of this was carried out using multiple linear regression. The findings indicated that ROA was negatively but insignificantly impacted by both enough capital and liquidity. Subsequent research found a substantial inverse connection between asset quality and ROA. The current study adopted ROE as the success metric as it gauges how well organization is utilizing the shareholders' funds to generate returns.

Conceptual Framework

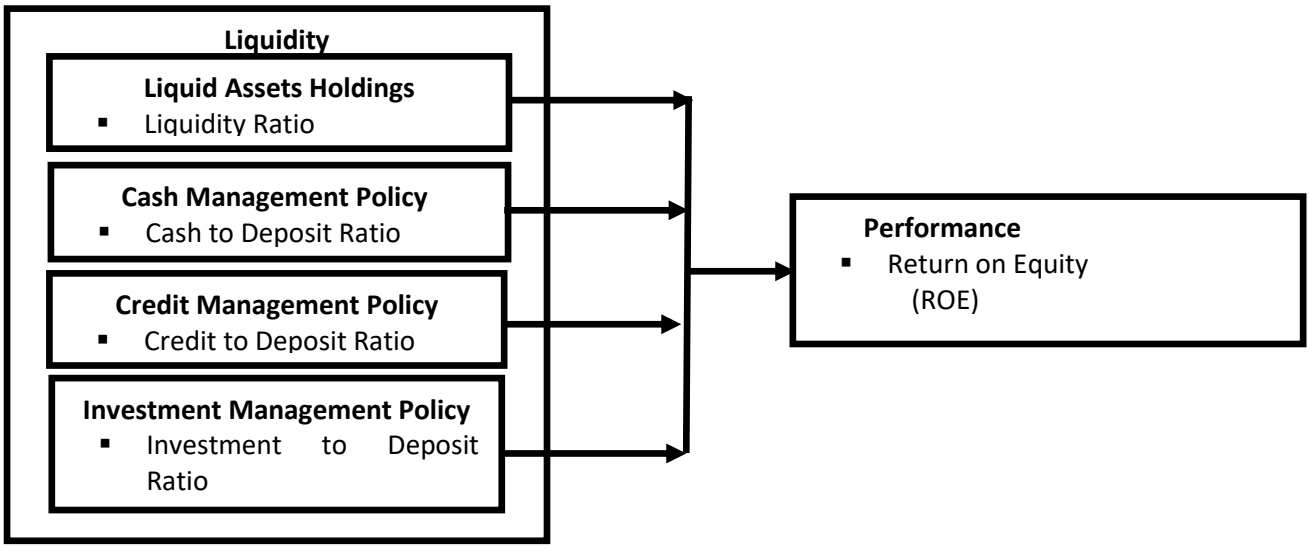

Figure 1: Conceptual Framework

METHODOLOGY

The study used a causal-comparative research design to investigate how liquidity affects the Kenya's commercial banks' efficiency. This research targeted all of Kenya's Commercial banks that have been operating and there were 43 of them between the five years of the study (2015 to 2019. Since this study focused on all 43 moneymaking banks in Kenya, a census methodology was used. The study used a data review guide to extract secondary data from the banks' publicly available fiscal declarations. The researcher gathered financial information from bank websites and the website of the Kenyan Central Bank. Financial data was recorded in excel sheets, transformed into ratios, and finally analyzed using the SPSS statistical software. This study employed descriptive statistics together with using statistical inference to examine the data.

FINDINGS AND DISCUSSIONS

Descriptive statistics of variables

Table 1: Descriptive analysis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROE	183	-.4728	30.4691	.2701	2.2518
Cash Management Policy	183	.0049	5.801	.2142	.6343
Credit Management Policy	183	.0000	8.0819	.7719	.7067
Investment Management Policy	183	.0000	4.4809	.1389	.4979
Liquid Assets Holdings	183	.0000	99.3000	38.9340	18.5754

The mean ROE was 27 % for the profitable banks, signifying that Kenyan banks have a moderate average ROE, a few banks were going into receivership after a few years. The maximum ROE was 30.4 and the standard deviation was 2.2518, this designated a high variation in fiscal performance within the banks in Kenya.

Cash management as a form of liquidity management policy recorded a minimum of 0.0049 and a maximum of 5. 801. The mean of cash management was 0.2142 which is evident that commercial banks can manage immediate or long-term cash needs but on a level that is below average. The standard deviation of 0.6343 within the period studied specifies that there is a small variation in cash management. showing a moderate variation in cash management policies affecting the Kenyan commercial banks' financial performance.

Similar cases were recorded for credit management policies which had a minimum of 0.0000 and a maximum of 8.0819. The mean was 0.7719 which indicates that commercial banks in Kenya can manage credits on a good scale, terms have been put in place and most banks have come up with payment plans that ensure credits are paid when due. Cash management policy had a standard deviation of 0.7067 which displayed difference in the values of credit management.

The investment management policy had a minimum of 0.000 and a maximum of 4.4809. The mean was recorded as 0.1389, this indicates that commercial banks are still struggling with the management of investments. The standard deviation was 0.4979 signifying a minimal deviation in the total investments made by commercial banks. Liquid assets holdings had a minimum of 0.0000 and a maximum of 99.30. The mean of 38.9340 was the highest recorded showing that commercial banks in Kenya have maintained their ability to convert assets to cash. The standard deviation indicated the biggest variations among commercial banks and their effect on fiscal performance.

Diagnostic Tests

To ensure the suitability of the collected study data, the research conducted a few diagnostic tests including; tests for normality, multicollinearity, Stationarity, Heteroscedasticity, and the Hausman test. This was conducted for all the study variables

Tests for Normality

To ensure the efficient use of the inferential statistics, the study tested for normality to ensure there was a normal distribution as revealed in Table 2.

Table 2: Test for Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
Variables	**Statistic**	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Return on Equity	.455	183	.180	.081	183	.217
Cash management	.484	183	.180	.135	183	.418
Credit management	.315	183	.180	.447	183	.331
Investment management policy	.473	183	.180	.145	183	.224
Liquid assets Holdings	.136	183	.180	.916	183	.134

Results from the table findings above for Sharpiro-Wilk values indicate a 0.418 level of significance for cash management, 0.331 for credit management, 0.224 for investment management policy, and 0.134 level of significance for liquidity assets. The level of significance for the Kolmogorov-Smirnov was 0.18 for all variables. The p-value for all variables is more than 0.05 signifying that the numbers were normally distributed and consequently cannot be rejected.

Multicollinearity Test

A test for multicollinearity was completed to assess whether independent variables in the study were correlated leading to any biases in the study data. To determine the level of correlation between The variance inflation factor (VIF) was used to independent variables for evaluation. A VIF greater than 10 indicates a multicollinearity problem between independent variables affecting research findings. Outcomes are presented in Table 3.

Table 3: Multicollinearity Test

	Collinearity Statistics	
	Tolerance	**VIF**
Cash management	.483	2.069
Credit management	.695	1.438
Investment management policy	.917	1.090
Liquid assets Holdings	.898	1.114

Outcomes in table 3 above specify that cash management had a VIF of 2.069, credit management 1.438, investment management policy 1.090, and liquidity asset holdings 1.114. These VIFs are all below 3 indicating that independent variables are not dependent on each other, there was therefore no bias in the assessment of the study factors.

Serial Correlation

Serial correlation examination was utilized in the study to test the correlation between the study variables. If there is no autocorrelation the Durbin-Watson ought to be between 1.5 to 2.5.

Table 4: Serial Correlation

Test	Statistic
Durbin Watson	1.996

Table 4 above, designates a Durbin-Watson value of 1.996 which indicates that serial-correlation does not exist between variables.

Test for Heteroscedasticity

In study data, heteroscedasticity occurs whenever the observed data's variance error term varies. The current study assumed that a value greater than 0.05 (>0.5) would indicate a very minimal heteroscedasticity problem. Results from the study are shown in table 5 below.

Table 5: Test for Heteroscedasticity

Model		Coefficients: Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	2.898	1.166		2.485	0.002
	Cash management	0.764	0.332	0.194	2.301	0.000
	Credit management	0.828	0.285	0.164	2.905	0.000
	Investment management policy	0.712	0.199	0.053	3.578	0.001
	Liquid assets Holdings	0.738	0.318	0.149	2.321	0.015

a. Dependent Variable: Return on Equity

The level of output indicated above shows that values obtained above were >0.05, hence, no notable deviations exist in the variations among tested dependent and independent variables.

Hausman Test

The Hausman test was done to test for the fixed/random effect model. Testing was done to help choose the most appropriate model for the regression analysis of the panel data. The null hypothesis asserts that the random effects model is preferable in this test, nonetheless, the alternate hypothesis asserts that the fixed effects model is ideal (Greene, 2008). The results are shown in Table 6 below.

Table 6: Hausman Test

Coefficients	(b)	(B)	(b-B)	Sqrt(diag(V-b-V_B))
	Fixed	Random	Difference	S. E
CAM	0.0377477	0.0245273	0.0132204	.0150851
CRM	0.0420579	0.0145136	0.0275443	.0224713
INM	0.0447088	0.0231371	0.0215717	.0219423
LAM	0.0459652	0.0449047	0.0010605	.0157452

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg Test: Ho: difference in coefficients not systematic

chi^2 (4) = (b-B)'[(V_b-V_B) ^ (-1)] (b-B)

=0.412

Prob>chi^2 = 0.837

Based on the test outcomes (Table 6), the chi-square for the Hausman test was 0.412 with a Prob>chi2 = 0.837 that was greater than 0.05. The null hypothesis that the fixed model is not the ideal fit, thus it was accepted, Consequently, the random effect model was used to analyze the effect of the Liquidity Management Policy on the Monetary Performance of Kenyan Moneymaking Banks

Inferential statistics

Regression analysis in statistics explains the relationships between research quantitative variables. A panel regression on the other hand shows an equation that predicts a dependent

variable from more than one independent variable. To figure out the connection between independent study variables and financial success which is the dependent variable. Multiple regression measurements for the study were created using SPSS V 25.0. In this analysis, the calculation of coefficients reveals the dependent variable's magnitude has changed are enlightened by the independent variable deviations or variations in fiscal success, (Dependent variable) as described by cash management, credit management, investment policy management, and liquidity assets, (independent variables). The study adopted the model below for multiple regression as recommended by (Kai, 2021) when conducting regression analysis for a time series data set

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon$$

Table 7: Model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.869[a]	.755	.610	3.2684

Table 7 reveals that the fiscal performance of moneymaking banks is strongly and positively impacted by cash management, credit management, investment management policy, and liquidity assets signified by r=0.869, which is statistically used to ration the strength and course of a straight line between the study objectives. The independent variables contributed 75.5%, as specified by the R squared value of 0.755. The value is a contribution to the fiscal performance of moneymaking banks in Kenya. The investigation exposed a favorable association between liquidity management policy and moneymaking banks' success. The adjusted R square value of 61% demonstrates how the independent variables influence 0.61 of the monetary performance of moneymaking banks. The r squared value of 61% shows that the regression model is Sufficient to Make Predictions for the study in addition to the number of independently determined factors in the investigation is not overfit for the study.

ANOVA Findings

Table 8 below demonstrates the ANOVA findings.

Table 8: ANOVA

ANOVA[a]

	Sum of Squares	df	Mean Square	F	Sig.
Regression	94.852	4	23.713	4.6080	.000[b]
Residual	915.963	178	5.146		
Total	**1010.815**	**182**			

Table 8 above demonstrates that the F statistic was 4.6080. The F statistic was substantial at a 5% level of confidence which implies that the predictor variables (cash management, credit management, investment management policy, and Liquid assets Holdings) show variations in fiscal performance, and therefore the model was substantial. The p-value from the ANOVA table indicated 0.000 which is less than 0.05 indicating that at least one of the study-independent variables had a substantial bearing on Kenya's commercial banks' fiscal success.

Random Effects Regression Results

Table 9, results of the random effects regression for the study's parameters. The table displays the coefficient of each of the study variables, their standard errors together with their corresponding t-values

Table 9: Panel Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.898	1.166		2.485	0.002
	Cash management	0.764	0.332	0.194	2.301	0.000
	Credit management	0.828	0.285	0.164	2.905	0.000
	Investment management policy	0.712	0.199	0.053	3.578	0.001
	Liquid assets Holdings	0.738	0.318	0.149	2.321	0.015

a. Dependent Variable: Return on Equity

Y_{it}= 2.898 + 0.764CAM + 0.828CRM + 0.712INM + 0.738LAH + ε_{it}

Y_{it} – Financial performance
CAM – Cash management policy
CRM – Credit management policy
INM – Investment management policy
LAM – Liquid assets holdings

The regression showed that when predictor variables are held constant at zero (0), the fiscal performance of the moneymaking banks in Kenya is fixed at 2.898 (p=002). This shows that the banks' Return on Equity remained constant at 2.898 in the absence of holdings of liquid assets, a policy for managing cash, a credit policy, and an investment policy. Commercial banks can therefore improve their financial performance above 2.898 through proper liquidity management policy.

Hypothesis Testing

This study was guided by four null hypotheses, based on the study's specific objectives. These hypotheses were tested at a 5 % level of significance.

H_{01}: Liquid assets holdings have no significant effect on the financial performance of Commercial Banks in Kenya

Studying the impact was the study's initial goal of Liquid Assets Holdings on success of Kenyan profitable banks. The study outcomes exposed that Liquid assets Holdings had a coefficient of 0.738 with a p-value of 0.015 which was less than 0.05. This shows that Liquid assets Holdings had a positive and noteworthy impact on the financial results of moneymaking banks. A change in the Liquid assets Holdings by one unit would lead to a corresponding change in the banks' monetary success by 0.738, in the same direction. This further meant that the last null hypothesis that Liquid Assets Holdings have no statistically substantial impact on Kenya's moneymaking banks' financial performance was also rejected.

This finding is supported by Omondi (2019) findings which discovered that liquidity risk had a positive consequence on the banks' fiscal success, as well as Abdulkadir (2017), whose findings indicated that leverage, liquidity, and the nonfinancial firms' performance had a positive association. However, studies conducted by Maina (2019); Sile, Olweny, and Sakwa (2019), found a poor correlation exists between banks' performance and their liquidity management.

H_{02}: Cash management policy has no significant effect on the financial performance of Commercial Banks in Kenya

The second study's objective was to ascertain the impact of Cash management policy on the success of Kenya's commercial banks. The study findings indicated a coefficient of 0.764 with a p-value of 0.000 which was also less than 0.05. This illustrates that the cash management policy had a favorable and considerable impact on Kenya's commercial banks' economic performance. The findings, therefore, implied that increasing cash management policy by one unit resulted in a rise in monetary performance by 0.764.

The research hypothesis was that cash management policy had no statistically meaningful influence on the monetary performance of Kenya's

moneymaking banks, this contradicted the results above which lead to the null hypothesis being rejected. This result contradicts the findings by Maina (2017), which indicated showing ROA was negatively impacted by both insufficient capital and liquidity. Moreover, outcomes displayed that asset quality and ROA had a strong undesirable association.

H_{03}: Credit management policy has no significant effect on the financial performance of Commercial Banks in Kenya

Thirdly, the study's goal was to establish the consequence of credit management policy on the fiscal performance of moneymaking banks in Kenya. Credit management policy had a coefficient of 0.828 (p= 0.000). The p-value of 0.000 which was less than 0.05 designated that Credit management policy had a substantial optimistic outcome on the bank's financial performance. These study findings, therefore implied that an upsurge in credit management policy by one unit would cause an improvement of 0.828 in financial performance. The null hypothesis that Credit management policy had no statistically substantial outcome on the fiscal performance of profitable Banks in Kenya was therefore rejected.

This study finding is in contradiction with Omondi, (2019), who found a negative significant link between credit risk and bank performance. However, the findings are in agreement with Muiruri (2017), whose discoveries exposed that the liquidity ratio had a substantial and direct stimulus on the bank's effectiveness, thereby recommending strict/proper preservation of the liquidity obligation by the CBK.

H_{04}: Investment management policy has no significant effect on the financial performance of Commercial Banks in Kenya.

The last objective of the research was to assess the consequence of Investment management policy on the fiscal success of moneymaking banks in Kenya. The discoveries indicated a coefficient of 0.712 (p= 0.001<0.05). This implied a positive and considerable impact of investment management strategy on the monetary performance of moneymaking banks. An increase in one unit of investment management policy-induced an increase of 0.712 in the institutions' financial performance. The fourth null hypothesis is that Investment management policy has been disregarded because it has no statistically meaningful bearing on the monetary performance of Kenya's commercial banks.

CONCLUSIONS AND RECOMMENDATIONS

The study findings showed that liquidity management policy is a significant basis of financial performance. Bestowing to the study findings, the correlation between ROE and cash management, credit management, investment management policy, and liquid assets holdings are positive. The research, therefore, completes that a rise/ positive change in the liquidity management policy of moneymaking banks in Kenya would increase the banks' fiscal performance.

In determining the consequence of Liquid Assets Holdings on profitable Banks' performance in Kenya, study findings revealed an impact that is both favorable and considerable on the bank's financial success. This study, hence, resolved that when the amount of liquid assets holdings increases, then return on equity also increases by a considerably large amount. In assessing the results of Cash management policy on the fiscal performance of profitable Banks in Kenya, study outcomes specified that Cash management policy had a very major impact on Kenya's profitable banks' fiscal performance. Regarding the outcome of Investment management policy on the Kenyan profitable banks' fiscal results, study outcomes exhibited a direct and positive outcome of Investment management policy on the bank's Return on Equity.

Lastly, to determine how Kenyan profitable banks' financial performance is influenced by their credit management policy, study discoveries showed a positive and substantial outcome on the bank's return on equity. Additionally, based on the study

findings, the Credit management policy was found to cause the most noteworthy impact on the banks' ROE. Thus, the study concluded that more consideration needs to be taken to the credit management policy to greatly improve the banks' financial performance.

Furthermore, according to the study's findings, liquidity management policy significantly influences how well commercial banks succeed financially. The R-squared revealed that independent variables (cash management, credit management, investment management policy, and liquid assets holdings) explained a considerably large percentage of the Kenyan commercial banks' varying financial performance

Stakeholders in the banking sector/ industry such as the regulatory authority- CBK, the policymakers, the financial institutions as well as other scholars shall find the study findings to be of great help. This study, therefore, came up with some recommendations to the various stakeholders based on the objectives of the research as follows;

With regards to the consequence of Liquid Assets Holdings on Commercial Banks' performance in Kenya, study findings revealed a favorable and substantial impact on the bank's monetary performance. This implied that when the sum of liquid assets holdings increases, then the return on equity also increases by a considerably large amount. This study, therefore, recommends a careful estimation of the most suitable amount of liquid assets holdings to be maintained by an institution at any given time to bring the required profit levels.

In assessing the influence of cash management practices on Kenya's commercial banks' financial results, study outcomes indicated that Cash management policy had a positive major outcome on Kenyan profitable banks' fiscal performance. Banks are therefore recommended to maintain moderate amounts of liquid cash to enable them to carry out their day-to-day activities.

Concerning the bearing of investment management strategy on the monetary performance of Kenyan profitable banks, study results showed a direct and positive consequence of Investment management policy on the bank's Return on Equity. The report advises banks to be more mindful of the types of assets they invest their funds in, as the increase in investment in profitable securities increases the banks' profitability. The management therefore should carefully increase the proportion of their deposits that they invest in other securities.

To establish credit management policy's impact on a company's fiscal performance in profitable Banks in Kenya, study discoveries showed an optimistic and significant outcome on the bank's return on equity. Furthermore, based on the study findings, the Credit management policy was found to cause the most noteworthy impact on the banks' ROE. Consequently, this study endorses more consideration to this policy by both the regulatory authority and the financial institutions themselves to minimize the non-performing loan amounts while achieving the required levels of profit margins at the same time.

Suggestions for Further Studies

This study mainly focussed on the liquidity management policy and Kenyan commercial banks' financial results. Additional study ought to be done to establish the other variables/ aspects that could be influencing commercial banks' performance in Kenya. Furthermore, other comparable studies should be carried out as well while considering other measures of financial performance apart from the ROE. This may include, Return on Assets, Return on Investments, Net profit margin, and others. Additionally, other studies can purpose to focus on other sectors of the economy other than the banking sector, while looking at liquidity management policy and financial performance.

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