## Liquidity Risk and Financial Performance of Deposit Taking Microfinance Banks in Kenya

Article history: Revised format: 6<sup>th</sup> Jan 2025, Available online: 16<sup>th</sup> May 2025

# Ooro Owino<sup>1</sup>; Dr. Okibo Walter<sup>2</sup>; Dr. Onchangwa Gilbert Achochi<sup>3</sup>

#### Abstract:

**Purpose:** The purpose of this study was to examine the influence of liquidity risk on the financial performance of Deposit Taking Microfinance Banks (DTMFBs) in Kenya. The study was guided by the Liquidity Preference Theory and the Financial Intermediation Theory.

**Material/methods:** The target population comprised all fourteen (14) registered Deposit Taking Microfinance Banks in Kenya, with the census method adopted due to the small population size. The study relied on secondary data, which were sourced from the Central Bank of Kenya (CBK), published financial records of DTMFBs, the Association of Microfinance Institutions (AMFI), and relevant databases and academic journals. The research instruments were pre-tested to ensure validity and reliability. Quantitative data were analyzed using descriptive statistics (frequencies, means, standard deviations) and inferential statistics, including Pearson correlation and multiple regression analysis. Data analysis was conducted using SPSS Version 22.0.

**Findings:** The study established a significant relationship between liquidity risk and the financial performance of DTMFBs. The regression analysis results indicated that liquidity risk is a critical determinant of financial performance in the microfinance banking sector.

**Conclusion**: The study concludes that effective liquidity risk management is essential for the financial sustainability of Deposit Taking Microfinance Banks in Kenya. Monitoring and mitigating liquidity risk can enhance stability and performance in the sector.

**Value:** This study provides empirical insights that can inform the development of risk management policies and regulatory frameworks. The findings are relevant for microfinance bank managers, policymakers, and financial sector regulators in Kenya and other jurisdictions with similar financial structures. The study also offers best practice recommendations that could be adopted to enhance the performance of microfinance banks.

*Keywords*: Liquidity Risk, Financial Performance, Deposit Taking, Microfinance Banks, Maturity Gaps, Asset Quality

# Paper Type: Research Article

**Recommended citation:** Owino, O., Okibo, W., & Achochi, O. G. (2025). Liquidity risk and financial performance of Deposit Taking Microfinance Banks in Kenya. *Journal of Economics, Management Sciences and Procurement*, 4(1), 232–245.

<sup>&</sup>lt;sup>1</sup> Master of Business Administration of Jomo Kenyatta University of Agriculture and Technology

<sup>&</sup>lt;sup>2</sup> Jomo Kenyatta University of Agriculture and Technology, Kenya

<sup>&</sup>lt;sup>3</sup> Jomo Kenyatta University of Agriculture and Technology, Kenya

# **1.1. Introduction**

Pioneered by Nobel Laureate Muhammad Yunus, microfinance emerged to uplift the financially marginalized by granting access to capital—often without traditional collateral—to launch and sustain small businesses (OECD, 2023). While microloans typically carry higher interest rates to offset default risk, the broader "microfinance" umbrella also encompasses microsavings and microinsurance, creating a suite of financial services aimed at fostering economic independence among underserved populations.

In countries like the United States and the Netherlands, deposit-taking microfinance banks (DTMFs) operate alongside commercial banks, offering personal, business, and asset-backed loans, as well as savings and withdrawal services (Rifat et al., 2016; Makysh et al., 2020). Their intermediation role—connecting surplus capital holders to credit seekers—has been credited with stimulating entrepreneurship, bolstering small and medium enterprises (SMEs), and strengthening local economies. Regulatory oversight by central banks ensures that these institutions maintain both liquidity and solvency (Nkuna et al., 2018).

In many emerging markets—from Sri Lanka to Brazil—DTMFs play a crucial role in extending credit to communities excluded by traditional banks, with stringent credit screening aimed at minimizing delinquencies (Makysh et al., 2020). Yet, global monitoring reports (World Bank & IMF, 2023) highlight persistent liquidity pressures: mismatches between small, unpredictable inflows and large, sudden outflows can jeopardize their ability to meet both operational needs and loan commitments. South African guidelines stress balancing short-term liquid assets against long-term obligations, while Ghanaian policymakers urge adequate liquidity buffers to safeguard against distress (Arif & Anees, 2012).

Optimal liquidity—a middle path between under- and over-liquidity—is critical to DTMF profitability and stability. Excess liquidity can depress returns, while too little can force loan cutbacks and hamper growth (Arif & Anees, 2012). Scholars identify bank size, asset quality, capital adequacy, and operational efficiency as key determinants of liquidity risk profile (Terraza, 2015). In Kenya, where microfinance fuels economic intermediation, rising credit risks and a decline in return on equity—from 21.99% in 2016 to 11.20% in 2022—underscore the urgent need for robust liquidity and risk management frameworks (CBK, 2023).

To navigate the twin challenges of meeting communities' credit needs and maintaining financial health, DTMFs must rigorously monitor asset quality—segmenting clients by repayment capacity—and uphold adequate capital buffers to absorb shocks (Nomran et al., 2017; CBK, 2022). Enhancing operational efficiency ensures that products reach customers cost-effectively, while sophisticated credit appraisal and diversified funding sources can mitigate liquidity shortfalls (Tran et al., 2019; Umoru & Osemwegie, 2016). By balancing social objectives with sound commercial practices, deposit-taking microfinance banks can continue to drive inclusive growth in both developed and developing markets.

Effective liquidity risk management ensures that deposit-taking microfinance banks can meet their short-term obligations without holding excessive liquid assets that lose value

in inflationary periods, thereby maximizing profitability (Hamid & Akhi, 2022). Yet many such banks in Kenya have suffered recurring financial distress due to mismatches between cash inflows and outflows—either too few liquid assets to cover debts or surpluses that devalue—exacerbated by weak monitoring techniques and inadequate risk controls (Galletta & Mazzù, 2019). This poor liquidity management has driven down returns on assets and equity, with ROE falling from 20.94% in 2020 to 17.38% in 2024 and a 10.3% decline in total interest income, contributing to bank failures and shaking investor confidence (CBK, 2022; Kinywa et al., 2022). Despite its critical impact on financial performance and systemic stability, the literature has yet to fully elucidate the role of liquidity risk in this sector, leaving gaps in our understanding of how best to safeguard microfinance institutions against liquidity-induced insolvency (Jha & Hui, 2012; Kamande, 2017; Liu, 2011; Ezra, 2013).

Effective liquidity risk management ensures that deposit-taking microfinance banks can meet their short-term obligations without holding excessive liquid assets that lose value in inflationary periods, thereby maximizing profitability (Hamid & Akhi, 2022). Yet many such banks in Kenya have suffered recurring financial distress due to mismatches between cash inflows and outflows-either too few liquid assets to cover debts or surpluses that devalue—exacerbated by weak monitoring techniques and inadequate risk controls (Galletta & Mazzù, 2019). This poor liquidity management has driven down returns on assets and equity, with ROE falling from 20.94% in 2020 to 17.38% in 2024 and a 10.3% decline in total interest income, contributing to bank failures and shaking investor confidence (CBK, 2022; Kinywa et al., 2022). Despite its critical impact on financial performance and systemic stability, the literature has yet to fully elucidate the role of liquidity risk in this sector, leaving gaps in our understanding of how best to safeguard microfinance institutions against liquidity-induced insolvency (Jha & Hui, 2012; Kamande, 2017; Liu, 2011; Ezra, 2013).

#### **1.2. Theoretical Literature Review**

Liquidity Preference Theory, first articulated by Keynes (1936), holds that interest rates adjust to equilibrate people's desire for liquidity-i.e., cash-against their willingness to hold less liquid assets like bonds. When investors strongly prefer liquidity, they demand higher yields to compensate for tying up funds in longer-maturity securities, driving up interest rates; conversely, lower liquidity preference lowers rates. Keynes identified three motives behind liquidity demand: the transaction motive (holding cash for everyday expenditures), the precautionary motive (reserving cash for unforeseen emergencies), and the speculative motive (waiting for more favorable rates before purchasing bonds). By understanding these motives, deposit-taking microfinance banks can strategically manage their liquid asset holdings-balancing cash reserves to meet short-term obligations with the need to earn higher returns—thus avoiding the twin pitfalls of insufficient liquidity and excessive idle cash that erodes profitability (Hamid & Akhi, 2022; Bibow, 2018).

Financial Intermediation Theory, developed by Gurley and Shaw (1960), posits that banks and similar institutions bridge information asymmetries between savers and borrowers, thereby reducing transaction costs and enabling efficient capital allocation. In this framework, microfinance banks perform a critical liquidity-management function: they collect short-term deposits and extend longer-term loans, profiting from the spread while monitoring borrowers to mitigate adverse selection and moral hazard. Strong internal controls and continuous auditing are essential to minimize costly

verification and enforcement procedures that arise when markets deviate from the ideal of perfect information (Arnold, 2014; Shittu, 2018). During periods of financial distress, these intermediaries' ability to rebalance their liquid assets becomes strained, potentially precipitating liquidity crises that impair bank operations and broader economic stability (Syafri, 2017; Levine, 2005).

The conceptual frame work (figure 2.1) shows the relationship between (Independent variable) and the performance of Deposit Taking Microfinance Banks in Kenya (Dependent variable). This study found out that liquidity risk management practices adopted in the study does have an effect on the performance of Deposit Taking Microfinance Banks. The conceptual framework is as shown in figure 2.1



Figure 2.1: Conceptual Framework

# 2.1. Empirical Review of Variables

Empirical review of variables relied on Published DMFIs reports, AMFIs reports, CBK reports and website publications and published journals, and database of Deposit Taking Microfinance Banks, periodicals, and books that looked at the theories and the empirical results relevant to the topic at hand (Zikmund *et al.*, 2010). This section represents literature in relation to the research objectives and gaps.

# Maturity Gap

A maturity gap is the difference between the total market values of interest rate sensitive assets versus interest rate sensitive liabilities that will mature or be re-priced over a given range of future dates. This difference provides measure of the interest rates which is usually based on the re-pricing risk that a Deposit Taking Microfinance Banks faces for sets of assets and liabilities of same or similar maturity dates and also considers the changing rates of interests on net interest income. This implies that if interest rates change, interest expense and interest income will also change as the various liabilities and assets are re-priced. In the banking industry, a maturity gap refers to the difference between the total market values of interest rate-sensitive assets and interest rate-sensitive liabilities aimed at maturing over a given range of future dates or be re-priced in future dates (Syafri, 2017). The interest rate-sensitive assets (IRSA) are assets held by the Deposit Taking Microfinance Banks that are

affected by changes in interest rates. The classic examples are the loans which aim to generate income through interest and principal payments and also considering other interest-bearing securities. Incomes from these assets change or are affected with the fluctuations in interest rates or as these assets are re-priced. At the same time, the interest rate-sensitive liabilities are liabilities that the deposit taking microfinance banks owes to others or other organizations which are also affected by the interest rates fluctuations. The main examples are the deposits. In the banking industry, deposits are considered liabilities and other borrowings as well. Higher interest rates for the depositors' means interest rates went up. Deposit taking microfinance banks makes use of maturity gap analysis to assess the difference between the liabilities, that is, money due to depositors and the assets which are the income expected from loans over a given period of time (Akinyomi, 2018).

CBK (2023) noted that deposit taking microfinance banks must have sufficient cash to meet their obligations as and must also have sufficient cash to meet their funding needs. Failure to undertake the above means facing liquidity risk. This implies that the Deposit Taking Microfinance Banks must monitor the terms of maturity for assets as well as the liabilities. When this gap (maturing assets and liabilities) is too large, then it means that the deposit taking microfinance banks may need to seek relatively expensive short-term borrowings and vice versa. When maturing assets and liabilities are balanced, operational stability would be enhanced. A Deposit Taking Microfinance Banks is exposed to risk of liquidity which is a risk of not having adequate cash to meet its funding requirements. The terms of maturity of the assets and the liabilities ratio must be monitored to ensure stability and adequate level of cash for its operations. Assets for deposit taking microfinance banks include loans, which is a stream of income in the form of interests and principal advanced to clients. On the other hand, liabilities which are deposits received from investors or customers would be an asset. The maturity gap can be positive or negative. When more rate sensitive assets are held than rate sensitive liabilities, a positive maturity gap is envisioned. The vice versa is also true where, if a bank holds less rate sensitive assets compared to rate sensitive liabilities, a negative maturity gap is experienced. The degree of volatility or potential risk is represented by the size of the gap between the assets and liabilities. In this gap and size, there may exist a maturity mismatch which directly influencing the current loan supply ability by the deposit taking microfinance banks. When net worth accumulates both maturity mismatch problems and the agency problem together, leads to excessive volatility of the financial system in banks (Effiong and Ejabu 2021).

A study done by Lian & Zhang (2015) observed that severe maturity mismatch in the Chinese financial deposit taking microfinance sector is officially recognized, there is a strand of the literature that focuses on the measurement the degree of maturity mismatch in banking system of China. Pan, Wang, & Tao (2017); Lian & Zhang, Citation (2015); Loan- (Zeng & He, Citation, 2016), and Liquidity Mismatch Index (Liu *et al.*, 2019) posit that Core Financing Ratio like Loan-Deposit Ratio (LDR), Liquidity Coverage Ratio and Liquidity Mismatch including Net Stable Financing Ratio, coverage ratio and liquidity mismatch index are quite important in decision making in the banking industry.

#### Asset Quality

Sufian *et al.*, (2008) investigated the determinants of Assets Quality Financial Performance in deposit taking microfinance banks' profitability in Philipine. The Panel

model design was adopted that covered the periods 1990-2005. The study found out that Asset quality negatively and significantly impacts on profitability of deposit taking microfinance banks' in Philippine. The management of deposit taking microfinance banks in Philippine differ from the context of management systems in Kenya hence the necessity that triggered the curiosity to undertake this study. Likewise, Vong et al, (2009) used ROA to measure financial performance of commercial banks in Kenya using banks-specific factors from 2007–2017. Liu (2011) investigated how CAMEL model impacts profitability of Chinese commercial banks quoted at the Shanghai Stock Exchange. The period of the study was 2008-2011 targeting 13 Chinese commercial banks. Asset quality significantly and negatively impacts profitability of Chinese commercial banks. The study focused only on Chinese Commercial Banks.

On the other hand Kamande (2020) studied how bank specific factors impacts Kenyan commercial banks' financial performance using Return on Assets. The study used predictor variables like Capital Adequacy, Asset Quality, liquidity and management efficiency. The study observed that Asset Quality and Capital adequacy positively impacted commercial bank performance sing Return on Assets. Current study seeks to establish the influence of liquidity risk on financial performance of Deposit taking Microfinance Banks in Kenya. The study seeks to measure bank performance using ROA, ROI and ROE. In Indonesia, Endah *et al.* (2018) studied liquidity risk and profitability of government owned and foreign owned commercial banks. The period of study was 2016-2022. The study found out that Asset quality negatively and significantly affects profitability and performance of the government and foreign owned commercial banks.

# 3.1. Research Methodology

This study employed a mixed-methods approach combining correlational and descriptive survey designs, leveraging both quantitative and qualitative data to examine how public financial management practices influence the performance of Kenya's deposit-taking microfinance banks (DMFBs). The correlational component quantified the strength and direction of relationships between independent variables (e.g., budgeting, internal controls, audit techniques, resource allocation) and the dependent variable (bank performance), drawing on frameworks that underpin variable selection and hypothesis testing (Amin, 2005; Cooper et al., 2007). Concurrently, the descriptive survey gathered systematic, real-world information to characterize current PFM practices and contextual factors-such as their prevalence, interrelations, and stakeholders' attitudes-across all 14 registered DMFBs in Kenya via a census approach, which maximized representativeness given the small, accessible population (CBK, 2025; Creswell, 2017). Data were primarily obtained through secondary sources: audited financial statements (income statements, balance sheets, cash flows) alongside regulatory reports from CBK, AMFIKenya, and peer-reviewed journals, with ratios computed to operationalize key constructs. Instrument validity was ensured through expert-led content reviews yielding a content validity index above 90%, and pilot testing (n=30 at Muungano Microfinance Plc) refined question clarity and reduced respondent fatigue. Reliability was confirmed via Cronbach's alpha, targeting coefficients  $\geq 0.70$  to demonstrate internal consistency. The finalized dataset was analyzed in SPSS using descriptive statistics (frequencies, means, standard deviations) to summarize PFM practice prevalence, and inferential techniques-including Pearson correlations, one-sample Kolmogorov–Smirnov tests for normality, multiple linear regression, ANOVA, and t-tests—to test hypotheses about the impact of PFM variables on financial performance, with results presented in tables and graphs to elucidate the relationships among budgeting efficacy, control environments, auditing rigor, resource optimization, and the overall health of DMFBs. multiple linear regression model as shown as;

$Y = \beta_0 + \beta_1 Z$ Where:	$X_1 + \beta_2 X_1$	<b>X</b> <sub>2</sub> + e <b>Equation</b> 4
Y Y	-	Performance of DMFIs in Kenya
<b>B</b> <sub>0</sub> , β <sub>1</sub> , β <sub>2</sub> , β <sub>3</sub> ,	β4, β5	Are regression Coefficients to be estimated
<b>X</b> 1	_	Maturity Gap
$\mathbf{X}_2$	_	Asset quality
e	_	Error term

The error term (e) is a random variable with a mean of zero, which captures the variables that cannot be quantified.

#### 4.1. Findings And Discussion

This section gives the analysis of the collected data from the Central Bank of Kenya (Regulator) website and library on Maturity Gap, Asset Quality and financial performance for Deposit Taking Microfinance Banks.

4.1.1. Descriptive Statistics

Table 1: Select Indicators for DMFBs over time

	0					
		2019	2020	2021	2022	2023
	Maturity Gap ratio	0.270	0.360	0.240	-0.460	-0.310
1.	(Percent)					
2.	Asset Quality ratio	0.210	0.294	0.321	0.318	0.315
3.	ROA (Percent)	-0.400	-3.80	-0.960	-1.390	-1.120
4.	ROE (Percent)	-3.000	-36.3	-7.750	-11.200	-13.210

#### Source: CBK (2025)

The analysis of key financial risk and performance indicators for Kenya's deposittaking microfinance banks over 2019–2023 reveals a complex interplay of liquidity, asset quality, and profitability challenges. The maturity gap—which measures the repricing mismatch between interest-sensitive assets and liabilities—fluctuated from positive gaps in 2019 (0.27), 2020 (0.36), and 2021 (0.24) to pronounced negative gaps in 2022 (-0.46) and 2023 (-0.31), signaling increasing liquidity risk as liabilities outstripped assets and banks faced difficulty meeting short-term funding obligations. Concurrently, the asset-quality ratio, defined as nonperforming loans relative to total loans, rose steadily from 0.210 in 2019 to a peak of 0.321 in 2021 before slightly declining to 0.315 in 2023—highlighting initial deterioration in loan portfolios followed by marginal improvement, yet still underscoring the need for stronger debtcollection and credit-risk controls. Profitability measures painted an equally volatile picture: return on assets (ROA) plunged from -0.40% in 2019 to a low of -3.80% in 2020 (coinciding with the COVID-19 shock), recovered somewhat to -0.96% in 2021, then slid again to -1.39% and -1.12% in 2022 and 2023 respectively; return on equity

(ROE) mirrored this instability—dropping from -0.30% in 2019 to -36.30% in 2020, improving to -7.75% in 2021, and deteriorating to -11.20% and -13.21% in the subsequent years. These trends underscore that, despite occasional gains, DMFBs have struggled to convert assets into profits, exacerbated by competitive pressures, funding mismatches, and credit delinquencies. Together, the fluctuating maturity gaps, persistent nonperforming loans, and negative returns illustrate that more rigorous liquidity management, tighter credit controls, and strategic asset-liability matching are essential to bolster the financial health and sustainability of Kenya's microfinance sector.

## 4.1.2. Correlation analysis

Correlation analysis was done to determine the antecedents of performance of Deposit Taking Microfinance Banks in Kenya. Table 4.6 shows the results.

		Financial Performan ce of DMFBs	Maturi ty Gan	Assets
Financial	Pearson	1	iy Oup	Quanty
Performance of	Correlation			
DMFBs	Sig. (2-tailed)			
	N	5		
Maturity Gap	Pearson	.630	1	
	Correlation			
	Sig. (2-tailed)	.706		
	Ν	5	5	
Assets Quality	Pearson	.780	476	1
	Correlation			
	Sig. (2-tailed)	.615	.418	
	Ν	5	5	5

Table 2: Overall Correlation Analysis

\*\*. Correlation is significant at the 0.01 level (2-tailed).

a. Dependent Variable: Performance of Deposit Taking Microfinance Banks in Kenya

b. Predictors: (Constant), Maturity Gap, Assets Quality, and Capital Adequacy

# Source: Research Data (2025)

The results in Table 2 revealed that there was a negative and significant association between Maturity Gap and Financial Performance of Deposit Taking Microfinance Banks (r = 0.63, p = 0.780). This implies that regulatory Maturity Gap has positive contribution to Financial Performance of Deposit Taking Microfinance Banks. Asset Quality had a positive correlation of 0.78. This revealed that there was a positive and significant association between Asset Quality and Financial Performance of Deposit Taking Microfinance Banks (r = 0.78, p = 0.42). This implies that Asset Quality has a positive contribution to the results of Financial Performance of Deposit Taking Microfinance Banks (r = 0.78, p = 0.42). This implies that Asset Quality has a positive contribution to the results of Financial Performance of Deposit Taking Microfinance Banks.

#### 4.1.3. Regression Summary Results

The regression results presented in Table 3 indicates performance of Deposit Taking Microfinance Banks in Kenya; Maturity Gap have negative coefficients whereas Asset Quality, and Capital adequacy, have positive coefficients. The coefficient addresses the regression model which relates the predictors (independent) and dependent variables as generated by the SPSS.

#### Table 3: Coefficients of Regression Summary Results

		Unstandardized Coefficients		Standardi zed Coefficien ts Beta	Т	Sig.
	Variable	В	Std. Error			
					-	
		-			2.62	
1	(Constant)	105.631	40.206		7	.232
	Maturity Gap	-1.965	5.396	116	364	.778
	• •			.625	7.94	
	Asset Quality	85.039	64.835		0	.415

a. Dependent Variable: Performance of Deposit Taking Microfinance Banks in Kenva

b. Predictors: (Constant), Maturity Gap, Assets Quality, and Capital Adequacy

#### Source: Research Data (2025)

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$  .....Equation 2 Where;

Y	-	Performance of DMFIs in Kenya			
<b>B</b> <sub>0</sub> , $\beta_1$ , $\beta_2$ , $\beta_3$ , $\beta_4$ , $\beta_5$ Are regression Coefficients to be estimated					
<b>X</b> 1	_	Maturity Gap, X2	_	Asset quality	
3	—	Error term			
<b>T</b> 7				1 1 6 1	

 $\mathbf{Y} = \beta_0 + \beta_1 \mathbf{M} + \beta_2 \mathbf{X}_{12} + \varepsilon$  becomes the optimal regression model of the study based on the significance is:

**Performance of DMFBs** =  $-105.631 - 1.965X_1 + 85.039X_2 + \epsilon_{e}$ 

Performance of Deposit Taking Microfinance Banks in Kenya, Maturity Gap, Asset quality and Capital Adequacy had insignificant values more than 0.05 at a testing at 95% level of significance. Hence their coefficients explain significant influence of independent variables and the performance of Deposit Taking Microfinance Banks in Kenya. The coefficient values of all the independent variables and the dependent variable were insignificant because p value (Sig value) was greater than 0.05 testing at 95% level of significance.

Liquidity Risk and Financial Performance of Deposit Taking Microfinance Banks in Kenya

Table 3: Regression Summary Results					
			Adjusted R	Std. Error of	
Model	R	R Square	Square	the Estimate	
1	.966 <sup>a</sup>	.933	.731	3.30679	

a. Dependent Variable: Performance of Deposit Taking Microfinance Banks in Kenya

b. Predictors: (Constant), Maturity Gap, Assets Quality, and Capital Adequacy

#### Source: Research Data (2025)

Model summary in Table 3 shows the output for model fitness and value of adjusted R squared to be 93.3%. This shows that the variables (Maturity Gap, Asset Quality and Capital Adequacy) tested explained 93.3% of variation on Financial Performance of Deposit Taking Microfinance Banks, in Kenya at 95% confidence interval. This implies that other factors not studied in this research contribute (6.7%) of the factors of Financial Performance of Deposit Taking Microfinance of Deposit Taking Microfinance Banks, Explanation (6.7%) of the factors of Financial Performance of Deposit Taking Microfinance Banks Kenya.

 $H_{01}$ : Maturity gap has no significant influence on financial performance of Deposit Taking Microfinance Banks in Kenya

The results of multiple regressions, as presented in Table 4.4 revealed that Maturity Gap has a positive and significant influence on financial performance of Deposit Taking Microfinance Banks with a beta value of  $\beta 1 = -1.965$  (p-value = 0.778 which is more than  $\alpha = 0.05$ ). Therefore, the researcher fail to reject the null hypothesis and it is accepted that for each unit decrease in Maturity Gap, there is -1.965 unit decrease in financial performance of Deposit Taking Microfinance Banks. The t – test value was - 0.362 which implies that the standard error associated with the parameter is less than the influence of the parameter. As opposed to the study findings, prior studies have shown that Maturity Gap influences financial performance of Deposit Taking Microfinance Banks (Heywood & Wei, 2006; Green & Heywood, 2008).

# $H_{02}$ : Asset quality has no significant influence on financial performance of Deposit Taking Microfinance Banks in Kenya

The results of Table 4.4 showed that the standardized coefficient beta and p value of Asset Quality were positive and significant (Beta = 85.039, p = 0.415 > 0.05). Thus, the researcher fails to reject the null hypothesis and it is accepted that, Asset Quality has a positive and significant influence on financial performance of Deposit Taking Microfinance Banks. Also, for each unit increase in Asset Quality, there is 85.039 unit increase on financial performance of Deposit Taking Microfinance Banks in Kenya. The t – test value was 7.940 which imply that the standard error associated with the parameter is less than the influence of the parameter.

The study findings sought to establish the influence of Liquidity Risk on Financial Performance of Deposit taking Microfinance Banks in Kenya. The first objective sought to find out how maturity Gap influences Financial Performance of Deposit taking Microfinance Banks. The second objective sought to find out how Asset Quality influenced Financial Performance of Deposit taking Microfinance Banks and lastly how Capital Adequacy influenced Financial Performance of Deposit taking Microfinance

Banks in Kenya. The results found out that there was a significant inluence of Maturity Gap on Financial Performance of Deposit taking Microfinance Banks suggesting that a unit decrease in Maturity Gap by -1.965 leads to direct decrease Financial Performance of Deposit taking Microfinance Banks. A 2-tailed test at 95% level of confidence had a probability value of more than 0.05 which implied that there was a significant correlation between Maturity Gap and Financial Performance of Deposit taking Microfinance Banks. Ali, Namusonge and Sakwa (2016) observed that Maturity Gap play an important role in ensuring the maximization of Financial Performance of Deposit taking Microfinance Banks. Also, Cheruiyot, Namusonge, Oketch and Sakwa (2018) examined and found out that Maturity Gap on Financial Performance of Deposit taking Microfinance Banks in Kenya had a positive correlation and hence positive relationship. The study findings on the Asset Quality and Financial Performance of Deposit taking Microfinance Banks in Kenya revealed that the variables are positively and significantly related ( $\beta = 85.039$ , p=0.415>0.05). This implies that a unit increase by 85.039 in Asset Quality would lead to an increase by 85.039 in the Financial Performance of Deposit taking Microfinance Banks in Kenya. The findings were in line with Mutungi (2018) who noted that Asset Quality has been widely used as a tool for improving Financial Performance of Deposit taking Microfinance Banks in Kenya by many private and public entities mainly to achieve their competitive advantage and established a strong positive relationship between Asset Quality and Financial Performance of Deposit taking Microfinance Banks in Kenya. Capital adequacy was also studied.

#### 5.1. Conclusion

Maturity gap on financial performance of Deposit Taking Microfinance Banks in Kenya are positively and significantly related. Maturity Gap were found to be satisfactory in contribution as a factor to financial performance of Deposit Taking Microfinance Banks in Kenya. Further, the study concluded that Maturity Gap play an important role in enabling an environment for the maturity gap and financial performance of Deposit Taking Microfinance Banks in Kenya. Maturity gap enables increasing share of the market of the DMFBs which eventually aims at ensuring a competitive advantage thus economies of scale can be achieved. Maturity Gap also facilitates a firm to assemble a mutually reinforcing business portfolio since resources that are critical can be shared among the units. Maturity Gap leads to higher firm performance as the firms can maximize their resources across business units to realize additional returns. Adoption of Maturity Gap is an enabler of asset specificity in a firm's resources which may bring sustainable competitive power and create a challenge especially on the firm's ability to transfer these resources to new application.

Asset Quality was found to be an acceptable predictor of financial performance of Deposit Taking Microfinance Banks in Kenya. Asset Quality enables managers to use internal funds in companies to ensure competitive advantage. Since financial resources have the highest degree of flexibility, the Asset Quality ratio is well suited for this. Asset Quality and Financial Performance of Deposit taking Microfinance Banks in Kenya revealed that the variables are positively and significantly related ( $\beta = 85.039$ , p=0.415>0.05). This implies that a unit increase in Asset Quality would lead to an increase by 85.039 in the Financial Performance of Deposit taking Microfinance Banks in Kenya. It is worth noting that the Asset Quality has been widely used as a tool for improving Financial Performance of Deposit taking Microfinance Banks in Kenya and public entities mainly to achieve their competitive advantage and

established a strong positive relationship between Asset Quality and Financial Performance of Deposit taking Microfinance Banks in Kenya.

#### **6.1. Recommendations**

Maturity Gap trends can be adopted by a DMFBs in order to capitalize on the synergies derived from the use of such a strategy. The positive effects of Maturity Gap should be embraced particularly the Kenyan government and the regulators. The regulators should put in place policies that encouraged DMFBs to undertake positive change aimed at improving financial performance of Deposit Taking Microfinance Banks in Kenya. The regulatory authorities should also formulate policies that ensure that there is a fair play in the market by all relevant market players in the different tiers of DMFBs. It is worth noting that a company should monitor the Maturity Gaps trends cautiously to aim at improving their firm's performance. The study recommended that DMFBs monitor and compare the Maturity Gap from one period and the other to ensure profitability to achieve competitive advantage. Therefore firms should always engage in research to identify new strategic regions to introduce their products.

The Asset quality also referred to as loan quality has been used to monitor risks attached to the various assets held by the DMFBs in Kenya. Asset quality best predicts the credit risk of the DMFBs and provides the best way to manage them. It is used as a tool to measure the performance of the DMFBs by how well a firm can use assets from its primary mode of business and generate revenues and incomes. Asset Quality ratio is used to measure the DMFBs overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. This was due to the fact that assets quality cannot solely determine the financial performance of DMFBs, unless other factors such as capital adequacy, management efficiency, earnings performance and liquidity are considered. A high level of Asset Quality is therefore desired to aim at optimum performance. The study therefore recommends that for high assets quality levels to be achieved, improved investment assets levels and the low rate of Non-Performing Assets are to be realized through credit risk measurement, monitoring, identification, and controlling would be preferred. The study recommends that maximization on the positive relationship between asset quality and performance of the Deposit Taking Microfinance Banks in Kenya should be encouraged. This is because when the ratio of Non-performing asset to net assets is lower, asset quality of Deposit Taking Microfinance Banks in Kenya is sound. This implies that the trade-off between profitability and the assets quality is positive.

# 6.2. Further Studies

The purpose of the study was to to establish the influence of Liquidity Risk on Financial Performance of Deposit taking Microfinance Banks in Kenya. The study therefore recommends further study to be done on other possible factors likely to influence the performance of loans in other tiers of banking institutions. Further studies can also focus on a comparative analysis of banks cash flows and the on Financial Performance of tier 1 Banks in Kenya or to be specific, on asset quality on profitability of Banks listed in Nairobi Securities Exchange (NSE).

#### References

- Akinyomi, J., (2018). Effect of Cash Management on Profitability of Nigerian Manufacturing Firms. International Journal of Technology Marketing, 1(4), 129–140.
- Amin, M. E, (2005), Social Science Research: Conception, Methodology and Analysis, Kampala, Makerere University Printery.
- Arif, A., & Anees, A. N. (2012). Liquidity risk and performance of banking system. Journal of Financial Regulation and Compliance, 20(2), 182-195.

Central Bank of Kenya (2022). Bank Supervision Annual Report, Kenya.

- CBK (2023). Bank Supervision Annual Report. Available at https://www.centralbank.go.ke/uploads/banking\_sector\_annual\_reports/19796 5474\_BSDANNUALREPORT2019%20.pdf. Accessed on 15th May 2023.
- CBK. (2023). Central Bank of Kenya Directory of Commercial Banks and Mortgage Finance Companies, Kenya. Retrieved on Thursday, 18thAugust, 2023; <u>http://www.centralbank.go.ke/downloads/bsd/Commercial%20Banks%20Dire</u> ctrory%20-%2031%20December%202010.pdf
- Creswell, J. W. (2017). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: SAGE Publications.
- Galletta, S., & Mazzù, S. (2019). Liquidity risk drivers and bank business models. Risks, 7(3), 1-18.
- Hamid A., & Akhi, K.G. (2022). The relationship between financial management practices and financial performance in the shipping industry in Kenya.
  Unpublished MBA project University of Nairobi, Kenya.
- Kamande, E. G. (2017). The effect of bank specific factors on financial performance of commercial banks in Kenya. International Journal of Sciences: Basic and Applied Research, 30(5), 165-180.
- Keynes J, M. (1936). The General Theory of Employment, Interest and Money. Basingstoke, Hampshire: Palgrave Macmillan. ISBN 0230004768.
- Jha, S., & Hui, X. (2012). A comparison of financial performance of commercial banks: A case study of Nepal. African Journal of Business Management, 6(25), 7601-7611
- Namusonge, G. & Sakwa, D. (2016). Effects of Strategic Management Drivers on Organizational Performance: A survey of the hotel industry in Kenyan Coast, *International Journal of Arts and Commerce*. 2(11), 83-105.

- Nkuna, O., Lapukeni, A. F., Kaude, P., & Kabango, G. (2018). The role of commercial banks on financial inclusion in Malawi. Open Journal of Business and Management, 6(04), 812-832.
- Nomran, N. M., Haron, R., & Hassan, R. (2017). Bank Performance and Shari'ah Supervisory Board Attributes of Islamic Banks: Does Bank Size Matter?. Journal of Islamic Finance, 176(5872), 1-14.
- OECD (2023). Deposit taking Microfinance and Governance practices: International Journal of Finance, 41(1/6), 211-247.
- Rifat, A., Nisha, N., Iqbal, M., & Suviitawat, A. (2016). The role of commercial banks in green banking adoption: a Bangladesh perspective. International Journal of Green Economics, 10(3-4), 226-251
- Sufian, F., & Chong, R. R. (2008). Determinants of bank profitability in a developing economy: empirical evidence from the Philippines. Asian Academy of Management Journal of Accounting & Finance, 4(2), 91-112.
- Syafri (2017), 'Factors Affecting Bank Profitability in Indonesia', The International Conference on Business and Management 6-7 sep.2012, Phuket-Thailand.
- Terraza, V. (2015). The effect of bank size on risk ratios: Implications of banks' performance. Procedia Economics and Finance, 30(9), 903-909.
- Umoru, D., & Osemwegie, J. O. (2016). Capital adequacy and financial performance of banks in Nigeria: Empirical evidence based on the fgls estimator. European Scientific Journal, 12(25), 295-305.
- Wang, P., & Ngomuo, S. I. (2017). Measuring Performance in Public Sector Organizations: Evidence from Local Government Authorities in Tanzania. European Journal of Business and Management, 7(9), 184-195.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). Business research methods. Boston, USA: Cengage Learning.