Earnings Quality and Financial Performance of Deposit Taking Microfinance Institutions in Kenya

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Abstract

Purpose: Financial performance ensures deposit taking microfinance institutions operations are sustainable and reach financially marginalized groups in Kenya. Earnings quality is used to measure financial performance of deposit taking microfinance institutions in Kenya as it helps in identifying both strength and weaknesses in financial management and make sure that these institutions are in a position to handle unexpected losses and sustained financial performance. However, deposit taking microfinance institutions in Kenya have been experiencing fluctuating financial performance. This trend may consequently lead to failure of these institutions to raise minimum capital requirement by the Central Bank of Kenya as well as raise ROE. This research sought to establish the effect of earning quality and financial performance of deposit taking micro finance institutions in Kenya.

Methodology: Descriptive research design was adopted by the research. A sample of eight out of a total of fourteen licensed deposit taking MFIs by CBK were used during this pilot research. Secondary data was collected using structured data sheet. This study relied on panel data. The linear relationship was modeled using multiple regression models. Data analysis was performed to sum up quantitative data, using measures of dispersion like mean, median and mode. STATA version 16 was used to perform the analysis, with relevant content presented in figures and tables.

Findings: Findings show only earning quality has a statistically significant effect on financial performance with p value of 0.000.

Unique Contribution to Theory, Practice and Policy: The study used earning theory to explain study objective. The study recommended DTMFIs to prioritize improving earning to improve ROE.

Keywords: *Earnings Quality, Financial Performance, Deposit Taking Microfinance Institutions*

INTRODUCTION

Financial performance demonstrate how well management use its capital structure available to ensure profits that could help in smooth operation of its planned activities (Almajali et al., 2012). As a result of growing tendency of unexpected losses, investors are concerned with ROE of these institutions (Omondi & Muturi, 2013). ROE is a key measure of the financial performance, and sound financial decisions are required to optimize return on assets (Diaz & Pandey, 2019). A positive return on equity means total assets used in the operations have the ability to earn improved income and whereas the negative ROE implies assets utilized during institutions operations can produce a loss (Ichsan et al., 2021). ROE helps financial institutions make decisions that strengthen their financial stability (Čihák & Hesse, 2010).

Earning quality as the reliability of the reported income to reflect real cash flow (Abdelghany, 2005). According to Ping (2020), bank management analyze earning quality to understand how to maintain current income and increase future profits. Shareholders usually use audited financial statements before taking a decision to invest in financial assets. They take into considerations details like consistency of the reported earning quality, risk factors affecting financial performance of an institution as well as accounting practices adopted during evaluation of earning quality (Bernstein & Siegel, 1979). Generally, earning quality is a surge of confidence to investors as there are minimal chances of lower returns to investments and also, gives confidence to the financial markets.

Statement of the Problem

Deposit Taking Microfinance Institutions in Kenya provides financial services to low income individuals and small businesses by offering savings accounts, microloans and insurance products to enable these groups to participate in economic activities of the nation. Between 2015 and 2023, the financial performance of DTMFIs in Kenya has exhibited a steady decline, reflecting growing structural and operational challenges in the sector. In 2015, the average ROE stood at approximately 2.0%, indicating modest ROE (CBK 2017). However, by 2016 and 2017, ROE slightly decreased to 1.65% and 1.21% respectively reflecting rising operational costs, increasing loan defaults and heightened competition from commercial banks and digital lenders (CBK 2019). In 2018 and 2019, ROE weakened further to 0.84% and 0.32%, as DTMFIs grappled with declining lending margins and stricter regulatory compliance signaling eroding profitability amid persistent credit risk. The situation worsened in 2020 pushing ROE into negative territory at –0.24% (CBK 2021).In 2021, 2022 and 2023, ROE performance remained subdued at –0.67%, –1.08% and –1.39% respectively underscoring persistent weaknesses in asset quality, liquidity management, and operational efficiency. Overall, this year-on-year decline indicates that most DTMFIs are struggling to sustain profitability and are operating below the sustainable ROE threshold of 8–10%, raising concerns about their long-term financial stability and ability to meet shareholder expectations. A sustained poor financial performance will affect the ability of DTMFIs to raise capital either through equity or debt, which is critical for growth and innovation. Besides, various studies that have been done trying to explain the relationship between earning quality and financial performance. Globally: Kumari (2017) studied financial performance of foreign commercial banks in Sri Lanka using the earning quality; Alemu and Aweke, (2017) studied performance of private commercial banks in Ethiopia using earning quality; Mohamed et al., (2023) looked at earning quality and Financial Stability of Commercial Banks in Kenya. Despite reviewed literatures, there are gaps that need to be filled. Most literature reviews focus on conventional banks, the effect of earning quality on the financial performance of DTMFIs remains unexplored despite the fact that the

institutions operate under different principles. Further, few studies have incorporated the effects economic shocks such as the CBK interest rate capping between 2016 and 2019 which had significant impact on earning quality. This represents a gap in capturing the evolving real world relationship between earning quality and financial performance across different phases of economic development and regulations. Further, this study will employ ROE as a measure of financial performance of DTMFIs over the period of study.

Objective of the Study

The general objective of the study was to establish the effect of earning quality on the financial performance of deposit taking micro finance institutions in Kenya.

Hypotheses of the Study

H_{01}: Earning quality do not affect the financial performance of deposit-taking microfinance institutions in Kenya

Theoretical Review

This section discusses the theory that guided the study

Earnings Theory

Earnings theory also referred to as the theory of interest was developed by Fisher in 1930. Fisher submits that the value of assets a financial institution own depends on its earnings. DTMFIs that record high earnings is expected to issue assets such as bonds or stocks with high returns. Geanakoplos, (2005) explained the role of interest rates in discounting the present value of future bonds and stock. He says interest rates discount depends on patience and impatience of households on the financial assets. According to Fisher (1959), financial institution needs to come up with bonds and stocks sales forecast to estimate future earnings and compare with other institutions operating on the same environment before making decisions on the value of their assets.

Earnings theory application is observed in monetary policy application by Central Banks. Jonsson and Reslow, (2015) posit inflation needs to relate with the difference between real and nominal interest rates before Central Banks decide to borrow, spend or invest. According to MacMinn (2005) asset prices in the financial markets depend on the existing interest rates. Market players observe interest rates changes and make decisions that could provide them with positive earnings. Carmichael and Stebbing, (1983) provides that, immediately when after-tax rates of interest has been affected at individual budget constraint will determine their consumption behavior. Kane et al., (1983) evidenced that investors in financial markets observe currency exchange rates and invest during the power performance of a strong currency with a hope that in future the currency will perform well and earn higher interest on their investment.

However, there are proves that this theory has its limitations. Bautista-Mena (2009) says one of the earning theory failures is in its assumption that rational agents correct for forecasting error after they learn actual inflation figure, which is unrealistic since human emotions are influenced by emotions, bias and imperfect information. Fisher (1927) adds that sometimes agents may lack essential economic information about future prices of financial assets which may lead to inefficiency of financial markets and unpredictable forecasts. Han (2024) points the inability of Fisher earning theory to accurately capture interest rates, diversity of inflation as well as their effects on economic decisions. This may affect effectiveness of interest rates in managing inflation rate.

Conceptual Framework

Conceptual framework is graphical variables representation, which are dependent variable as well as independent variables. Figure 1 displays the conceptual framework that illustrates how variables link while explaining research objective.

Earning Quality		**Financial Performance**
• Net Profits to Total Assets ratio	→	• Return on equity ratio

Independent Variable   **Dependent Variable**

Figure 1: Conceptual Framework

Empirical Review

Chowhury et al., (2017) determined effect of capital adequacy, earnings quality and leverage on Islamic Banking Profitability. Descriptive method was employed to examine data from five Islamic banks in Bangladesh from 2011 to 2014. Findings demonstrated that capital adequacy, earning quality and leverage affect financial performance of banks. However, this results cannot be generalized to the effect of earning quality on financial performance of all financial institutions since a small sample size of five banks as well as a short period of four years were used to analyze the relationship between dependent and independent variables. The current study will look into how earning quality affect financial performance of the eight licensed DTMFIs in Kenya from 2015 to 2023.

Theophillus et al., (2018) examined the impact of earnings quality on the financial performance of the listed firms in Nigeria. A descriptive research design was used to gather information from 51 firms listed on the NSE from 2000 to 2016. Findings show that earning quality and financial performance are related. However, current study cannot rely on these findings because the variable such as financial performance and earning quality were measured using Tobin Q and earning smoothness respectively, contrary to current study which measures both financial performance and earnings quality using ROE and operating profits to total assets ratio respectively. In addition, Theophillus et al., (2018) employed data from 2000 to 2016 whereas current study will utilize current data from 2015 to 2023.

Huynh (2019) investigated reputation to the vicious circle of earning quality and financial performance in Vietnam. A survey technique was used to gather data from the 194 firms publicly listed in Vietnam from 2012 to 2015. Findings clearly show earning quality influence financial performance. It was evident that earning quality uplifts organization reputation and therefore leads to positive ROA of corporate institution. Therefore, top management of organizations and accounting researchers need to consider looking deep into earning quality and provide accurate analysis on this variable for financial performance of organizations. Current study looks to provide current information on relationship between earning quality and ROA of DTMFIs using data from 2015 to 2023.

Utami et al., (2019) analyzed the effect of earnings quality on financial performance of banks in Indonesia. A descriptive design was used to analyze data of eight banks from 2006 to 2018. The findings indicated earning quality directly affect income. In details, earning quality affect financial performance in private banks more than that of state owned banks. Besides this

relationship and findings, there is gap between Utami et al., (2019) study with the current study. First, analysis technique used in Utami et al., (2019) study will be complex to implement and interpret to the current study which will employ census technique to gather data from every DTMFI target. Second, Utami et al., (2019) study data period runs from 2006 to 2018 which is not up to date compared with current study gathering data from 2015 to 2023.Therefore current study seek to fill this gap.

Saleh et al., (2020) investigated the effects of earnings quality on financial performance of companies in Jordan. Panel data was used to analyze 52 companies listed on ASE from 2010 to 2018. Study findings demonstrate statistical relationship between earnings quality and financial performance. It was evident that managing managers' behaviors through improved working environments as well as accurate accounting information will influence variables of study. However, current study seeks to find out the influence of earning quality on financial performance of the 8 licensed DTMFIs in Kenya from 2015 to 2023. Saleh et al., (2020) study employed sample technique as a result of vast data compared to the current study which will employ census technique to analyze population of study therefore avoiding misrepresentation of the population of study.

METHODOLOGY

Research Design

This study used a descriptive research design. Descriptive research designs aim to describe a relationship between dependent and independent variables without interfering with their characteristics.

Population of the Study

The target population for this study included the 8 licensed DTMFIs. Target population comprises of entire set of individuals or subjects that has been designated as the focus of the research study (Kothari, 2018).

Sampling Frame

The sampling frame is a list of individuals that can be selected from the target population depending on the sampling method used in the study (Martínez-Mesa et al., 2016). This research sample frame included the list of 8 licensed DTMIs in Kenya.

Census Technique

Data was obtained from the published balance sheets, cash flow statements and income statements of the eight Deposit Taking Microfinance Institutions in Kenya for the period 2015 to 2024. Census technique was used when study employs the whole population of study as the sample.

Data Collection Instruments

Investigation encompasses acquisition of data from secondary sources of 8 regulated DTMFIs by CBK. A secondary data collection sheet was employed to gather the requisite information. This data was extracted from the yearly balance sheets, income statements and cash flow statements of each institution as from the list of 8 licensed deposit-taking microfinance institutions websites.

Data Processing and Analysis

The research predominantly relied on quantitative data. STATA version 16 Software was used to analyse data since it was panel data. Panel regression model was used in this research to illustrate correlation of dependent variable, namely ROE, with explanatory variable earning quality. Pearson correlation coefficient was employed to find out both scope and orientation concerning interrelationships among measures under consideration (Kothari, 2015). Panel regression model future as presented by equation 1;

$$Y_{it} = \alpha + \beta_1 X_{1it} + \varepsilon_{it} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 1$$

Where:

Y_{it} represent financial performance at time t.

α represent constant term of independent variable

X_1 represent earning quality

it represents Firms in time **t**

ε represent error term

FINDINGS AND DISCUSSIONS

The chapter entails descriptive statistics used, trend analysis, diagnostic tests used, correlation analysis and regression analysis.

Descriptive Statistics

Descriptive statistics was used to summarize data and present them in way that was easy to interpret. It included observations, mean, standard deviation, minimum and maximum of each variable as shown in Table 1

Table 1: Descriptive Statistics Results

Variable	Obs	Min	Max	Mean	Std. Dev.
Return on Equity	80	- 0.9926	0.9903	0.0452	0.4893
Earning Quality	80	- 0.0375	0.0481	- 0.0001	0.0196

Table 1 shows that the minimum ROE recorded was –0.9926, indicating that in some years, certain DTMFIs incurred substantial losses relative to shareholders' equity. The maximum ROE was 0.9903, meaning the most profitable institutions generated up to 99.03% returns on equity during the study period. The mean ROE of 0.0452 suggests that, on average, DTMFIs earned approximately 4.52% of shareholders' equity annually, implying that shareholders received modest returns from their investments. The standard deviation, recorded at 0.4893, reflects considerable variability in ROE across institutions and over time, signalling fluctuating financial performance. Such instability may contribute to investor uncertainty regarding the sustainability and reliability of returns from DTMFIs.

Table 1, the minimum earning quality ratio was –0.0375, indicating that in their worst-performing periods, some DTMFIs incurred substantial losses relative to their asset base. The maximum value recorded was 0.0481, showing that at their best, some institutions were able to generate modest profits from their assets. The mean ratio, at -0.0001, suggested that overall, the institutions made slight losses in relation to their assets, reflecting weak earning capacity. The standard deviation of 0.0196 showed small variations of earning quality across DTMFIs, implying that fluctuations in financial performance were present but not extreme. These

variations indicate that while DTMFIs experienced periods of improved profitability, they also encountered phases of reduced returns, often influenced by changes in asset levels.

Trend Analysis

Trend analysis was done for each of the study variable

Trend Analysis for Return on equity

The trend analysis shows the flow of return on equity between 2015 and 2024. The results are as shown in Figure 2.
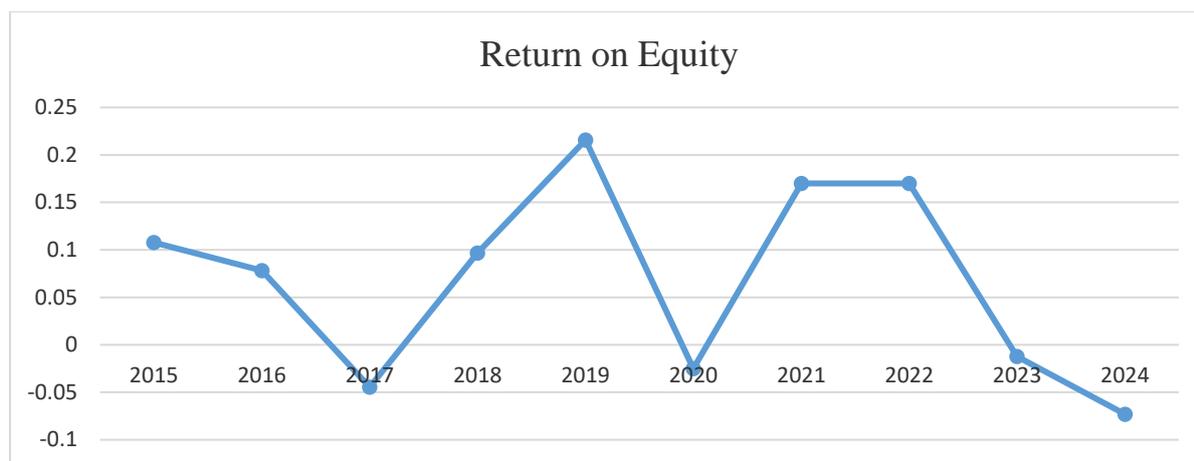

Figure 2: Trend Analysis for Financial Performance

Earning Quality

The trend analysis tends to show the flow of earning quality from the eight microfinances between 2015 and 2024. The results are as shown in Figure 3.

Figure 3: Trend Analysis for Earning Quality

There was a fluctuation in annual average interest rate risk recorded by the DTMFIs with the highest ratio 0.0063 recorded in 2016 while the lowest ratio -0.0069 recorded in 2017. This indicates that earning quality has never been stable among the DTMFIs becoming a challenge to accumulate profits for assets.

Inferential Analysis

The study conducted inferential analysis to establish the relationship between earnings quality and financial performance of deposit taking microfinance institutions in Kenya and draw broad conclusions.

Correlation Analysis

The study computed Spearman correlation analysis to establish the strength and the direction of the relationship between the dependent and the independent variable. The findings were as presented in Table 2.

Table 2: Correlation Analysis

Variable	Return on Equity	Earning Quality
ROE	1.0000	
Earning Quality	0.6784**	1.0000

$*p < 0.05$, $**p < 0.01$.

Earnings Quality showed a strong positive correlation with ROE ($r = 0.6784$, $**p < 0.01$), indicating that higher quality earnings are strongly associated with better financial performance in microfinance institutions. This strong correlation highlights earnings as one of the key drivers of RO. The findings are similar to those of Muriithi and Waweru (2022), who demonstrated that strong earnings quality significantly enhances profitability among Kenyan commercial banks, noting that institutions with steady income streams are better positioned to absorb shocks and sustain operational growth. Likewise, Asare and Kusi (2020) in Ghana reported that high-quality earnings positively impact both ROA and ROE among microfinance institutions, reinforcing the idea that sustainable earnings underpin financial resilience.

Regression Analysis

The study computed regression analysis to establish the effect of earnings quality on the financial performance of deposit taking micro finance institutions in Kenya. The findings were also used to test the research hypothesis. Table 3 presents the model summary and the ANOVA findings.

Table 3: Model Summary

Model 1	Multiple R	R Squared	Adjusted R Square	S.E Regression	Obs
ROE	0.6553	0.4292	0.3906	0.3819	80

Table 3 indicates the results of the model summary with Multiple R of 0.6553, indicating a moderately strong positive relationship between the combined earnings quality and ROE of DTMFIs. This suggests that, collectively, the predictors explain a substantial portion of the variations in financial performance. The R Square value is 0.4292, meaning that approximately 42.92% of the variability in ROE is explained by the combined earnings quality. This demonstrates that the model has good explanatory power in the context of financial performance studies, where values between 20–50% are common due to the influence of many external market and institutional factors. The Adjusted R Square is 0.3906, which adjusts for the number of predictors in the model. At 39.06%, it confirms that even after accounting for model complexity, the predictors still explain a meaningful proportion of ROE variance.

The Standard Error of the Regression (S.E = 0.3819) suggests a moderate level of prediction accuracy. This value indicates the average distance between the observed ROE values and the regression line. A lower standard error would imply higher accuracy, but in financial performance models where ROE can fluctuate significantly due to economic, operational, and institutional factors this level of error is acceptable and indicates a reasonably good model fit. Lastly, with 80 observations, the sample size is adequate for regression analysis involving four predictors. It provides sufficient statistical power to detect meaningful relationships among the variables.

Analysis of Variance (ANOVA)

The study further evaluated the model's significance through the Analysis of Variance (ANOVA) technique. The results are presented in the table below.

Table 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.1180	2	1.6236	11.13	0.0000
	Residual	10.7976	77	0.1459		
	Total	18.9156	79			

The ANOVA results assess whether the overall regression model significantly explains the variation in ROE using earnings quality. The F-statistic is 11.13, with a significance value (p-value) of 0.0000, which is less than 0.05. This indicates that the regression model is statistically significant. A Sum of Squares for Regression of 8.1180 versus a Residual Sum of Squares of 10.7976 shows that a substantial proportion of the total variance in ROE is explained by the model. This corresponds to the earlier R Square of 0.4292, meaning that the predictors collectively account for about 42.92% of the total variation in ROE. The Mean Square Regression value (1.6236) compared to the Mean Square Residual (0.1459) further indicates that the variation explained by the model is considerably larger than the unexplained variation. Overall, the ANOVA results confirm that the regression model provides a good fit and that the earnings quality have a significant predictive effect on ROE in DTMFIs in Kenya. The findings validate the use of the earnings quality in explaining financial performance within the microfinance sector.

Regression Coefficients

The study conducted a panel regression model to account for both cross-sectional and time-series variations in the financial performance of DTMFIs in Kenya. A random effects model was adopted following the results of the Hausman. The findings are shown in Table 4.5

Table 4.5: Regression Coefficients

	Coef.	Std. Err.	t	P › |t|	[95% conf. interval]	
Earning quality	0.8567	0.2237	3.8297	0.0002	1.1128	1.9897
Constant	-0.0494	0.0332	-1.4880	0.013	-0.1144	0.0157

The output generated as per the STATA is as presented in Table 4.9, thus the equation is as shown:

$$Y_{it} = -0.0494 + 0.8567X_{it}$$

Where:

Y_{it} represent dependent variable financial performance at time t.

α represent constant term of independent variable

X represent earning quality

it represents Firms in time t

Hypotheses Test Results

The objective that is the earnings quality revealed the coefficient of 1.5513 implying that a one-unit increase in earnings quality results in a 0.8567-unit rise in ROE, making it one of the strongest predictors in the model. This indicates that stable and sustainable earnings significantly boost profitability in DTMFIs. The p-value of 0.0002 shows extremely high statistical significance, leading to rejection of the null hypothesis. These findings align with Muriithi and Waweru (2022) and Mutuku and Mwangi (2021), who also found that high-quality earnings strongly enhance ROE in Kenyan MFIs. Similarly, Asare and Kusi (2020) reported matching results in Ghana.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The chapter presents the summary, conclusion and recommendations of the study as per the study objective.

Summary

Earnings quality emerged as a key determinant of financial performance. Correlation analysis indicated a strong positive relationship, suggesting that institutions with stable, sustainable, and high-quality earnings tend to achieve superior profitability. Regression results further confirmed that earnings quality is one of the most influential predictors of financial performance among DTMFIs. Institutions that generate reliable income are better positioned to expand operations, reinvest profits, and maintain long-term growth. The study underscores the role of consistent earnings in strengthening financial soundness and institutional resilience.

Conclusion

The study concludes that earnings quality is one of the strongest predictors of financial performance. Institutions with stable and high-quality earnings are more financially resilient and better positioned to invest in growth opportunities. High earnings quality signals strong risk management, reliable income streams, and sustainable operations. As such, earnings quality serves as a critical indicator of long-term financial soundness among DTMFIs.

Recommendations

Earning quality results illustrated a strong positive regression coefficient which is statistically significant. This means that DTMFIs need to improve their earning quality by ensuring a strong reporting standards which improves client confidence, reducing financial statements manipulation and also ensuring transparency in declaring their revenue. All these will help maintain earning quality which will lead to sustained ROE. Investors are interested on investing institutions that show high interest yielding assets as compared to low interest yield assets. Therefore, DTMFIs should prioritize improving earning quality as it positively influences financial performance.

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