

The Relationship between Management Efficiency, Capital Adequacy, and Asset Quality on Commercial Banks' Performance in Kenya.

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Abstract: *The performance of the banking roles exposes banks to among other risks, the liquidity risk that requires sound management of funds. The study investigated the relationship between management efficiency, capital adequacy, and asset quality and banks' performance in Kenya. The research used a descriptive research design. All commercial banks that were actively operational over the five fiscal years (1st January 2011- 31st December, 2015) formed the targeted population for the study. The findings indicate that approximately 22.7% of the variation in the commercial banks' return on assets over the period covered by the study resulted from the variation in their management efficiency, capital adequacy, and asset quality. The test of significance of the regression model suggests that it is significant at the 0.05 level; thus, the regression model significantly predicts the return on assets of the commercial banks comprising the basis of the study.*

Key words: *capital adequacy, management efficiency, bank performance, asset quality.*

1. Introduction

The theory of financial intermediation by Diamond (1984) posits that an essential task of banks in the marketplace is to offer liquidity by financing long term, illiquid resources with short term, liquid financial obligations. Through this task of offering liquidity, banks provide cash and demand deposits to the rest of the public. The function of banks as intermediaries provides the need to assess bank performance based on capital adequacy. The buffer capital adequacy theory postulated by Calem and Rob (1996) banks may prefer to hold adequate funds to reduce likelihood of being placed under receivership. The capacity of banks to mobilize enough deposits is an indicator of good liquidity risk management practices as they can meet customer demands when need arises.

The financial sector plays an integral role in any economy and this necessitates the need to have a strong financial system. The financial sector is essential for trade, commerce, and industrial development (Ongore & Kusa, 2013). In Kenya, the

financial system (greatly influenced by banks) plays a pivotal role in economic development. The Kenyan banking sector is presently comprised of conventional and Islamic banking systems; which collectively work together to enhance effective financial services delivery to the citizens. The banks are either public or privately owned but the overall regulation is vested with the Central Bank of Kenya (Central Bank of Kenya, n.d).

Goodhart (2008) found out that the main goal of any bank is to increase the earnings though having enough funds is an integral goal. The predicament faced by the management of banks is the tradeoff between increasing profits and minimizing liquidity costs. Investors measure overall company performance with an aim of making the right investment decisions (Dang, 2011). Financial performance measurement is also done for internal managerial purposes such as planning, motivation and internal decision-making activities. Shareholders evaluate how well the management is working based on how much earnings they get from their investments.

To measure performance of banks, there various ratios used of which Return on Assets, Return on Equity and Net Interest Margin are the major ones (Alexandru et al., 2008). These measures though accepted as conventional metrics, have some limitations as they do not consider the risk level, governance issues of the commercial banks and the quality of assets held. This study considered financial success of commercial banks using ROA, which is considered as a robust measure of financial performance as it shows how competently the assets of the firm are utilized to earn income (Khrawish, 2011).

2. Literature Review

This section reviews concepts that influence bank performance. Succinct explanations are provided from reviewed literature to guide in reaching valid inferences with regard to their connection to performance of commercial banks in Kenya.

2.1 Capital Adequacy

Adequate capital ought to be available as it supports the continued functioning of the bank; in terms of offering its mandated services to the public. Capital acts as a cushion during undesirable financial conditions. Capital adequacy ratio (CAR) is adopted to evaluate the level of capital available in a bank (Dang, 2011). CAR represents the capacity of the bank in question to meet demand deposits as well as profitably run its operations. Total capital to total risk weighted assets ratio was used as the measurement metric for capital adequacy.

2.2 Asset Quality

A bank's assets entail current assets, credit portfolio, non-current assets, and other investments. Usually, an expanding asset (size) is linked to the period the bank has been in existence (Athanasoglou et al., 2005). In conventional bank operations, the loans of a bank encompass a huge chunk of the bank's assets that earns the biggest share of the banks income in form of interest income. This assertion implies that the superiority of loan portfolio defines the level of financial performance of commercial banks. Conversely, the highest deterrents to profitability to a bank are the losses arising from 'bad' loans (Dang, 2011). Thus, banks ought to keep the level of nonperforming loan ratios minimal as they indicate the bank's asset quality. The measurement metric used was gross non-performing loans to gross loans ratio.

2.3 Management Efficiency

Management efficiency is an integral factor that determines organizational profitability. Financial ratios such as total operating revenue to total profit indicate effective management by the bank's executives. However, it is a sophisticated determinant of bank profitability as some studies show correlation between management practices and firm performance while others do not. Though some financial ratios portray management efficiency, the potential of executives to use its assets efficiently, enlarge income, while keeping costs minimal can be hard an undertaking to link with managerial activities. In spite of these limitations, management efficiency in this regard, has been conventionally considered as determining the extent of operating costs and ultimately determines financial performance (Athanasoglou et al. 2005). Noninterest operating expenses to profit before tax ratio was used.

Profitability of commercial banks refers to their ability to generate revenue that exceeds their operational costs. Athanasoglou, Brissimis and Delis (2005) cited that an excellent and profitable financial

sector can endure depressing economic shocks and facilitate the stability of the banking sector. All commercial banks are expected to adhere to specific regulations like lowest cash reserves and liquidity ratios with the central bank. In June 2015, the Cabinet Secretary for Treasury proposed to increase the capital requirement level from one billion shillings to five billion shillings. Only 21 banks as of June 2016 met the CBK requirement to raise the capital reserves to 5 billion shillings (The National Treasury, 2016). The goal was to create a strong and stable banking sector that would ultimately lead to economic growth though this received criticism from stakeholders as some argue there is no relationship with increasing liquidity level requirements and bank performance.

2.4 Conceptual Framework

This model shows the link amid variables investigated. Since ROA reflects the efficiency of how the assets under the control of management are used to earn income, it is an intuitively a robust measure of performance; therefore, this study measured financial performance using ROA.

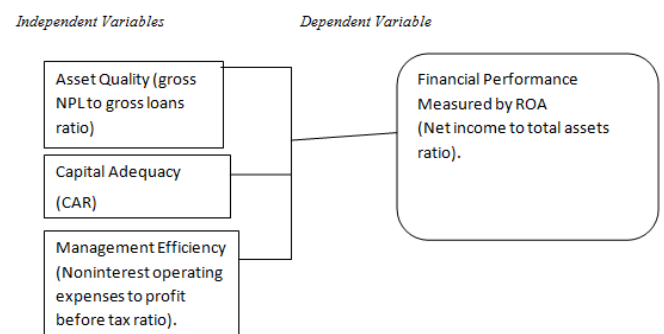


Figure 1: Conceptual Framework

3.0 Methodology

A descriptive research design was adopted in this research in which correlation of the variables measured was done without manipulation, to ascertain whether there is any relationship. Cross-sectional data was collected once over the period of 1st January 2011 to 31st December 2015 to facilitate analysis. All commercial banks that were actively operational over the five fiscal years (1st January, 2011- 31st December, 2015) formed the targeted population for the study. As of 31st December, 2015, there were 42 commercial banks operating in Kenya. Data on the net profits, gross loans, gross non-performing loans, liquidity ratio, customer deposits, and total assets was collected from commercial banks that were in operation for the selected research

period. The information from the financial statements helped in computation of ratios to aid in reaching reliable and relevant conclusions on the relationship between variables under analysis.

The regression models used in this study had four independent variables and one dependent variable. Financial performance was the dependent variable that was measured using ROA and the independent variables were asset quality, management efficiency, and capital adequacy.

The multiple regression model that was used:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Financial performance measured using ROA.

ROA is calculated by dividing the company's net profits for the year by its total assets.

X₁; Capital Adequacy measured by Total Core Capital to Total Risk Weighted Assets Ratio.

X₂; Asset Quality measured by Gross Non-performing Loans to Gross Loans Ratio.

X₃; Management Efficiency measured by Total noninterest operating expenses to Total Profits before tax.

α = Regression constant

ε = Error term normally distributed about the mean of zero.

β₁, β₂ ... β₃ were the coefficients of variation

The test of significance was performed at 95% level of confidence. Analysis of Variance (ANOVA) and the F- test was used to ascertain the significance of the regression. Product moment Pearson correlation analysis was carried out to find the direction of the relationship between ROA against the independent variables.

4.0 Results and Discussion

| Correlations | | | | | |
|-----------------------|---------------------|---------|------------------|---------------|-----------------------|
| | | ROA (%) | Capital Adequacy | Asset Quality | Management Efficiency |
| ROA (%) | Pearson Correlation | 1 | -.435** | -.367* | .079 |
| | Sig. (2-tailed) | | .004 | .017 | .618 |
| | N | 42 | 42 | 42 | 42 |
| Capital Adequacy | Pearson Correlation | -.435** | 1 | .522** | -.477** |
| | Sig. (2-tailed) | .004 | | .000 | .001 |
| | N | 42 | 42 | 42 | 42 |
| Asset Quality | Pearson Correlation | -.367* | .522** | 1 | -.026 |
| | Sig. (2-tailed) | .017 | .000 | | .870 |
| | N | 42 | 42 | 42 | 42 |
| Management Efficiency | Pearson Correlation | .079 | -.477** | -.026 | 1 |
| | Sig. (2-tailed) | .618 | .001 | .870 | |
| | N | 42 | 42 | 42 | 42 |

** . Correlation is significant at the 0.01 level (2-tailed).
 * . Correlation is significant at the 0.05 level (2-tailed).

Table 1: Correlations

From the analysis, there is a positive correlation between the commercial banks' return on assets and

the management efficiency, which is significant at the 0.01 level;

| Model Summary | | | | |
|---|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .476 ^a | .227 | .166 | 2.14515% |
| a. Predictors: (Constant), Management Efficiency, Asset Quality, Capital Adequacy | | | | |

Table 2: Regression Model Summary

The coefficient of multiple correlation stands at 0.476, suggesting that there is a positive relationship between the actual values of the dependent variable and those predicted by the regression model. The coefficient of determination, R Square, stands at 0.227, suggesting that approximately 22.7% of the variation in the commercial banks' return on assets over the period covered by the study resulted from the variation in their management efficiency, capital adequacy, and asset quality. A test of significance of the regression model was conducted and the results are illustrated in the following table.

| Model | | Coefficients ^a | | | | t | Sig. |
|-------|-----------------------|-----------------------------|------------|---------------------------|--------|------|------|
| | | Unstandardized Coefficients | | Standardized Coefficients | | | |
| | | B | Std. Error | Beta | | | |
| 1 | (Constant) | 4.799 | .723 | | 6.637 | .000 | |
| | Capital Adequacy | -.053 | .026 | -.412 | -2.068 | .046 | |
| | Asset Quality | -.036 | .041 | -.155 | -.886 | .381 | |
| | Management Efficiency | -.034 | .047 | -.122 | -.715 | .479 | |

a. Dependent Variable: ROA (%)

Table 3: Test of Significance

From the table, only capital adequacy significantly predicts the dependent variable. The significant values of the test statistics used to evaluate the significance of the individual coefficient falls below 0.05 level at which the significance test was performed, except the coefficient of management efficiency and asset quality.

Conclusion and Recommendations

From the findings, a positive relationship between the commercial banks' return on assets and the management efficiency exists, which is significant at 0.01 level. Capital adequacy and asset quality have a negative correlation with the return on assets. . As the capital adequacy ratio rises, the return on assets declines. Increasing the capital adequacy ratio requires the acquisition of additional capital, which

makes commercial banks incur finance expenses that eat into the operating revenue, resulting in a decline in the return on assets (Shen, Chen, Kao and Yeh, 2010).

The results show that approximately 22.7% of the variations in the commercial banks' ROA over the period covered by the study resulted from the variation in their management efficiency, capital adequacy, and asset quality. Managerial efficiency, is considered a significant predictor of performance as Athanasoglou et al. (2005) holds a view that effectiveness in management of banks underpins the extent of costs incurred and the eventual bank performance. The regulators should enhance the requirements for capital adequacy, especially during periods of economic recess when banks' risk exposure is likely to increase. Managers should also consider how the strategic and tactical decisions they make are likely to affect their banks' liquidity risk. Decisions that increase the liquidity risk should be avoided, since they will result in a decline in financial performance.

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