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FINANCE

FIRM SIZE AND PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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ABSTRACT

Research objective: The study sought to determine the impact of bank size on commercial bank performance in Kenya. The study used the natural logarithm of total assets as a measure of bank size.

Research Methodology: The population of the study included thirty-nine commercial banks in Kenya. Secondary data from audited annual financial statements was used in the study, which spanned an eight-year period from 2013 to 2020. The data collected was analyzed using descriptive statistics and multiple regression analysis.

Findings: Commercial banks had average total assets of Kshs 13.83 billion, according to descriptive findings. The results of the regression analysis showed that size of the bank has a statistically significant effect on performance.

Conclusion: The study concluded a statistically significant relationship between bank size and performance. Hence, there is a long-run and a short-run equilibrium between bank size and asset returns. It was found that as bank size increases, return on assets also increases.

Recommendations: Commercial banks should improve in a diverse range of ways relating to bank size. In addition, the banks should pay special attention to the estimation and supervision of their loan portfolio.

Keywords: *Firm size, financial performance, Commercial banks, Kenya.*

INTRODUCTION

Every financial institution's primary goal is to operate in a profitable environment in order to maintain stability and long-term growth. Many nations rely on financial institutions to control the amount of money in circulation by accepting deposits, issuing loans, and providing transfer services, among other things. When these functions are not carried out properly, they impede economic growth and destabilize a country's economy (Levine, 2012).). According to Gicharu, Evusa, and Ariemba (2016), bank performance indicates a bank's ability to achieve its objectives through the use of a set of indicators. Increased financial performance reflects the bank's management's efficiency in utilizing its resources by optimally combining its financial services and set of inputs to achieve its goals (Itumo, 2013).

Bank size is an important factor in determining a bank's financial performance because it affects internal operations and is measured by the bank's net total assets, which account for both economies of scale and diseconomies of scale. It has been demonstrated that increasing bank size can increase bank profitability marginally. However, due to bureaucracy and other factors, very large banks may suffer as a result of their size. As a result, the relationship between the size of a bank and its profitability should be non-linear (Javaid, 2016).

STATEMENT OF THE PROBLEM

Alfadhli and Alali (2021) investigated the impact of bank asset size on the financial performance of Kuwaiti banks. The findings, which were based on data from ten Kuwaiti banks that were listed on the Kuwait Stock Exchange (KSE) between 2008 and 2018, showed unfavorable association, but it was statistically insignificant. On the other hand, the findings demonstrated a statistically significant direct relationship between bank profitability and shareholder equity. Commercial banks' financial performance in Kenya has improved over the last ten years. However, there have been instances when performance has reduced significantly (CBK, 2019). According to Onuonga (2014), commercial banks experienced a 20% decline between fiscal years 2010 and 2015. Commercial banks increased their pre-tax profit by 16.6 percent in the 2012/2013 fiscal year, down from 20.6 percent in the previous year. Due to the important intermediary role that banks play, it is therefore important to understand the impact bank size has on financial performance. In spite of sufficient empirical evidence provided by most of these prior studies such Xu, (2012), Kapaya and Raphael (2016), Ajao and Ogieriakhi (2018), Bhattarai, (2019), Yakubu and Egopija, (2021), the results from the studies had contradicting findings and were not conclusive hence creating empirical and conceptual gaps.

RESEARCH OBJECTIVE

The study determined the impact of bank size on commercial bank performance in Kenya.

LITERATURE REVIEW

The summary of previous research done by scholars on factors affecting commercial bank financial performance are discussed on this section.

Theoretical review

Efficiency Structure

The efficiency structure theory was developed by Demsetz (1973). According to the theory, firms with a higher degree of market concentration are expected to be more efficient. It is assumed that such firms will be highly profitable while maintaining significant market share. According to the efficiency structure hypothesis, efficiency leads to increased bank profitability. There are two approaches to the efficiency hypothesis: Scale-efficiency and X-efficiency.

Using the X-efficiency approach, firms become more efficient and profitable as their operating costs decrease. Such companies typically acquire large market shares, which may result in high levels of industry concentration but does not imply a cause-and-effect relationship between concentration and profitability.

The scale approach prioritizes economies of scale over differences in management. Large corporations can achieve lower unit costs and higher profits through economies of scale. This allows them to gain market share, which may result in a highly concentrated market and thus profitability (Athanasoglou et al, 2008). This theory was significant because it relates bank performance to how effective management is at managing costs and scale of operation. The theory is relevant to the study because banks must become more efficient in order to compete effectively in a highly concentrated market, resulting in growth, which can only be achieved if banks fully comply with internal factors affecting their performance.

Modern Portfolio Theory

Harry Markowitz developed the portfolio theory in the early 1950s (Markowitz, 1952). This was later published in the 1970s by Black and Scholes (1973), providing banks with a strategy to use when diversifying their loans and investments. According to portfolio theory, risk-averse investors can build a diversified portfolio to maximize investment return given the level of

market risk. According to the theory, it is possible to achieve the expected return at a given level of risk by establishing an efficient frontier of optimal portfolios. This enables investors to evaluate and monitor the performance of their investments, as well as investment professionals to meet their clients' needs and select portfolios based on their expected return and risk tolerance (Fabozzi et al., 2002).

Empirical Review

It has been established that increasing bank size can boost bank profitability slightly. Nonetheless, due to bureaucratic system and other issues, the impact of size may be detrimental in the case of particularly large institutions. Alfadhli and Alali (2021) sought to investigate the impact of bank asset size on Kuwaiti bank financial performance. The findings, based on data from ten Kuwaiti banks listed on the Kuwait Stock Exchange (KSE) between 2008 and 2018, revealed an unfavorable relationship, although it was statistically insignificant. The findings, on the other hand, revealed a statistically significant direct relationship between bank profitability and shareholder equity.

Sritharan (2015) assessed the size and performance of listed corporations in Sri Lanka's hotel sector. The study used a fixed effect econometric estimation model on secondary data collected from a target population of 30 firms between 2008 and 2012. The findings revealed a positive relationship between firm size and profitability. The primary independent variable in the study was firm size, and profitability was measured using return on assets and an econometric model with fixed effects. The findings reveal contextual gaps that necessitated a local investigation. The empirical gaps highlight the need to evaluate other key firm characteristics such as credit risk and income diversification in the assessment.

Gatete (2015) investigated the impact of bank size on bank profitability in Kenya. A regression analysis model and descriptive research methodology were used to analyze the data. The target population consisted of 43 Kenyan commercial banks. Commercial bank profitability, according to the findings, is moderately correlated with bank size. However, the bank's effectiveness, credit policies, and investment decisions all have an impact on how much money it can make from its assets. The study left an empirical gap in the need to broaden the scope of the evaluation and include more firm-specific factors influencing bank performance. The study's goal is to determine the impact of other firm-specific factors on bank performance, such as credit risk and income diversification.

RESEARCH METHODOLOGY

Research design

The study employed a causal design. According to Saunders et al. (2009), a causal research design is used to explain the cause-and-effect relationship between the study variables. CBK (2020) lists 41 banking institutions, 39 of which are commercial banks. The study's target population consisted of thirty-nine banks. A census sampling technique was used, in which all elements with similar characteristics were included in the study. The conducting of census was ideal for the study because it minimized the sampling errors. The sample included thirty-nine banks, as those under statutory management and receivership were excluded. Quantitative secondary data was gathered from CBK supervision reports and bank annual financial statements from 2013 to 2020. The study used a document review guide to extract data. The summary of the operationalization of study variables are presented in Table 1

Table 1: show operationalization of study variables

Variable type	Variable	Operationalization	Indicator	Measure	Measurement
Dependent Variable	Bank Performance	Measures how well banks utilize their financial assets to generate revenue	Return On Assets (ROA)	Net profit to total assets	Ratio
Independent variable	Bank size	Measure of a bank's holdings in terms of assets, staff, branch network, clientele, deposits and loans	Bank Size (BS)	Log of total assets	Interval

RESULTS AND DISCUSSION

The study results are presented in sections.

Descriptive statistics

The summary of the descriptive statistics are illustrated in Table 2.

Table 2: Mean and standard deviation of study variables

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	184	.013	.032	-.204	.081
Bank size	184	11.165	1.351	8.219	13.83

Source: Research data (2022)

From 2013 to 2020, the average return on assets (ROA) for commercial banks in Kenya was 1.3 percent, indicating that a significant portion of their assets were used to generate profits as shown in Table 2. The minimum and maximum values were -0.204 and 0.81, respectively, with a standard deviation of 0.32. The average bank size was 11.16, with total assets averaging ksh 11.165 billion and a standard deviation of 1.35 with 8.219, and 13.83 for the lowest and highest values.

Diagnostic tests

The assessments on the selected variables were performed to ensure that they met the requirements of multiple regression techniques, and the results were consistent and accurate.

Normality test

Before proceeding with the analysis, the variables were checked for normality. If the response variable is not normally distributed, statistical analysis will be difficult until the variable is normally distributed (Sarsfield & Garson, 2017).

Table 3: Normality results

Variable	Obs	W	V	z	Prob>z
ROA	184	0.718	39.086	8.399	0.075
Bank size	184	0.968	4.373	3.381	0.154

Based on the results in Table 3, the p value for the research variables was higher than 0.05. Hence, the findings demonstrate that bank performance followed a normal distribution.

Multicollinearity

Multicollinearity occurs when the independent variables have a high correlation. The variance inflation factor (VIF) and tolerance were determined by increasing the standard errors of the coefficients using collinearity statistics. VIF is a measure of how much multicollinearity inflates the regression coefficient and skews the standard errors.

Table 4: Multicollinearity results

ROA	VIF	1/VIF
Bank size	1.163	.86

From the results in the Table 4, the VIF value was less than 5, indicating that the collinearity had no detrimental ramifications. The presumption that multicollinearity does not exist was not violated because all tolerance results were greater than 0.2

Regression Analysis

The regression analysis was conducted to examine the relationship between the variables.

Table 5: Bank size and bank performance

ROA	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
Bs	.013	.002	6.46	.000	.007	.013	***
Constant	-.102	.018	-5.68	.000	-.138	-.067	***

Mean dependent var	0.013	SD dependent var	0.032
R-squared	0.186	Number of obs	184
F-test	41.699	Prob > F	0.000
Akaike crit. (AIC)	-775.575	Bayesian crit. (BIC)	-769.145

*** $p<.01$, ** $p<.05$, * $p<.1$

The following model was developed from the above regression analysis;

BP= -0.102 + 0.013 Bank size

The findings in Table 5 reveal that the P-value was below the 0.05 threshold for significance indicating that bank performance was significantly impacted by bank size. The value of R square was 0.186 implying that 18.6% of the difference in bank performance is caused by changes in bank size leaving 81.4% to be explained by other factors. The study objective was to determine the effect of bank size on financial performance of commercial banks in Kenya. The findings are thereof shown on table 4 above. This objective was achieved by forming a null hypothesis which states that bank size has no effect on financial performance. To evaluate the significance and direction of the association between the predictor and explanatory variable, the coefficient was used. An increase by one unit in bank size increased bank performance by 0.013 units. The study's findings are consistent with those of Nyanga (2012), Ally (2014), Gyamerah and Amoah (2014), and Sankale (2019), who discovered that bank size has a positive influence on bank performance. The study findings, however, contradict those of Mohammad (2015), Tigist (2014), and Tesfaye (2013), who found a negative relationship between bank performance and bank size.

SUMMARY OF FINDINGS AND CONCLUSION

The study focused on examining the impact of bank size on commercial bank performance in Kenya. The study found that commercial banks had average total assets of Kshs 13.83 billion, according to descriptive findings. The results of the regression analysis show that the size of the bank has a statistically significant effect on bank performance. According to the findings, there is a long-run and a short-run equilibrium between bank size and asset returns. The study concluded there is a statistically significant relationship between bank size and performance. The study's findings support the assertion that, in order to improve bank performance, each bank should strive for the optimal asset-to-loan ratio and encourage more client deposits. Furthermore, the study concludes that bank size is desirable and can serve as a performance buffer. Large banks with a large net asset, deposit, and loan portfolio earn a higher return on assets. To summarize, despite operating in the same macroeconomic environment, certain Kenyan banks appear to outperform their counterparts in terms of returns.

RECOMMENDATIONS

The following recommendations are made based on the study's findings and conclusions: Commercial banks should improve in a diverse range of ways, relating to bank size. Since results have demonstrated that bank size has a positive impact on Kenya commercial banks' performance, special attention should be paid to the estimation and supervision of their loan portfolio.

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