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THE EFFECT OF FINANCIAL STRUCTURE ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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KeyWords

Capital structure, Commercial banks, Deposits, Debt, Equity, financial structure, financial performance

ABSTRACT

Corporate failure is frequently linked to a company's financing strategy. Corporate entities all over the world are faced with the problem of determining the appropriate finance that will boost the value of the entity and maximize the wealth of the shareholders. Firms need funds for their operational day to day activities and also for undertaking viable projects. Hence, capital either debt or equity capital raised from investors is inevitable. Internal finance, which is equity, and external finance, which is debt are the two main forms of finance that firms can employ to supply the required funds. Most companies use a mix of equity and debt which form the capital structure. Commercial banks on the other hand, have access to an extra financing source which is deposits. Deposits form a big portion of funds available to commercial banks for operational activities. The different research initiatives done to study the relationship between capital structure and performance have yielded inconsistent results. How a firm's financial structure affects performance is still a question which needs to be critically addressed in research. The study's overall goal was to determine the effect of the financial structure on commercial bank financial performance. Secondary data was collected from commercial banks financial statements over ten-year period, from 2010 to 2019. The Hausman and the Breusch-Pagan lagrangian multiplier test were used to choose the appropriate model that would produce accurate estimations for the research. The Fixed effect regression model was selected to analyse the panel data which consisted of both time series and cross section data. Financial performance was the dependent variable and was measured using Return on Assets (ROA). The independent variables were deposits, debt and equity respectively. The results of the study showed that the model was significant with the independent (predictors) variables accounting for 68.41 per cent of the variance on the financial performance. The most favorable significant effect on financial performance was equity variable, which was followed by deposits. Debt had a modest but non-significant negative effect on performance. From the study's findings it was noted that commercial banks in Kenya had high amounts of debt. This affected their financial performance negatively. As a result, the study recommends that commercial banks should increase their efforts to rely more on internally produced funds as a means of finance while maintaining a healthy equity-to-debt ratio. Furthermore, commercial bank's management should ensure that the optimum capital structure is always engaged by altering the debt-equity ratio at intervals. It is also recommended that shareholders should be involved when additional funds are required in making financing decisions. This will ensure quality decisions are made by comparing the implicit costs and benefits of issuing additional shares or obtaining debt finance. Finally, the study recommends to bank management that they should look for ways to attract more deposits, especially deposits for longer periods of time e.g. fixed deposit accounts. This will reduce their over reliance on external debt capital which is more costly. The available deposited funds can be used by commercial banks to finance their investment activities. In addition, the funds can also be issued as loans to customers. Hence, the bank can generate loan interest income which forms a significant portion of commercial banks income. This will in effect enhance their financial performance.

I. INTRODUCTION

Commercial banks play a crucial role in promoting economic growth and their importance cannot be overstated. Commercial banks serve as

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a main source of credit for many individuals and small enterprises. The banking and insurance sector are quite unique compared with other sectors in that they rely heavily on leverage and have debt-heavy business models. Private enterprises, on the other hand, particularly small enterprises that are obliged to obtain personal guarantees from their owners, may find it more difficult to use debt over equity.

A country has a definite advantage when there is a favorable economic environment and a sound financial system. A sound financial system exists with the following characteristics; "Major banks have enough capital to withstand any adverse shock, availability of skilled staffs that are trained on how to analyze and assess the prevailing market conditions and are able to devise appropriate strategies for managing liquidity, credit, market, and other risks" (Scott and Timothy, 2006). The inability of business finance managers to achieve the best possible proportion of funds in carrying out daily activities, hence, putting their profitability at danger, has led to the rapid failure of some banks in the past.

A firm may finance its operations by either using debt or equity. Commercial banks on the other hand have an additional source of finance which is deposits. Decisions about the financial structure of a firm are crucial since they affect the financial performance substantially. Managers must operate at a level where the cost of capital is modest or zero in order to optimize the value of their firm.

A company's financial structure needs to be properly handled to ensure that it stays in operation and can finance all its activities and projects. There are several factors that influence the capital and financial structure of a firm. First, it's the cost of each component of capital. Secondly, we have the nature of assets. Firms with very valuable assets can acquire more debt since such assets can be used as security for the loan. Hence, such firms will end up having more debt in their capital structure. Thirdly, a firm with high business risk associated with fluctuations in revenue will require low levels of debt, since the firm may not be in a position to meet its debt obligations on a timely basis. For example, most firms in the agricultural sector are lowly geared; this is because of their high business risk due to fluctuations in their earnings. The size of the firm and the scale of its operation also determine access to funds. Hence, large firms will have high gearing levels because they have higher ability to access debt capital. Lastly, the industrial norms also determine the capital and financial structure of firms. This is essence means that a firm's capital structure will be similar to the capital structure of other firms in the same industry.

Corporate executives have a responsibility to make good strategic decisions when choosing between the various financing options available to a firm. Ross et al., (2009) observed that the manner a bank combines its debt and equity will determine its performance.

In finance excessive amounts of debt is a source of concern. This might imply that a business is overly reliant on debt capital. Leverage is based on the premise that managers will be able to profit more from borrowed funds even though it will incur loan interest charges. Debt has various benefits e.g. it increases an organization's current resources for expansion. However, in order to successfully carry a big amount of debt, a firm must have a track record of meeting its numerous borrowing agreements.

The challenge for management and investors is whether an appropriate capital structure exists. It is quite impossible to say at what level a bank's optimal capital structure should be. This is because each bank's capital structure is different.

The Performance of Commercial Banks

Companies can stay for years without making a profit, relying on the goodwill of lenders and investors, but in order to thrive in the long run, they must achieve and maintain profitability. The capital structure is primarily made up of two types of financing: equity and debt. The mixed and contradictory results on business performance are explained by the use of each type of financing.

Different profitability ratios exist to allow investors and analysts to assess a company's operational efficiency from a variety of angles. These ratios reveal a more complete picture of firms underlying value, financial state, and growth possibilities. Return on assets was used in this study to measure financial performance.

Return on Assets (ROA)

ROA is able to reveal how well a company utilized its assets in terms of profitability. It is one of the key profitability ratios which can be used to compare the performance of a company with other similar firms in the industry, or to compare its current performance with the past performance. A high ROA ratio indicates that a company is performing well and generating big returns on assets, hence a higher ratio of ROA is better.

As a formula, it would be expressed as:

II. STATEMENT OF THE PROBLEM

The banking sector is fundamentally distinct from any other market sector in terms of high leverage and regulation. According to Shoaib (2011), it may be essential to issue stocks in a combination of equity and debt in order to reach an exact composition that effectively maximizes a firm's value, and if this is realized, the company has attained its optimal capital structure. It is quite impossible to say at what level a bank's optimal capital structure should be. This is because each bank's capital structure is different. Managers face a challenging problem in determining their ideal capital structure, i.e. the level at which risk and costs are minimized while allowing them to generate more profits GSJ: Volume 10, Issue 4, April 2022 ISSN 2320-9186

in the long run and increase the shareholder's wealth. Banks, in general, operate under a set of regulations that are completely unique and only apply to that sector, making it impossible to describe the relationship between the banking and the rest of the sectors. Hence, research findings based on data from other sectors may therefore not apply to the banking sector.

The financing model of a business is typically tied to its own success or failure. The higher a company's debt-to-equity ratio is, the more debt it utilizes to fund its operations. This increases the risk of the business, with a higher chance of bankruptcy and a more likelihood that the firm will experience financial problems. In addition, disputes may arise between shareholders and creditors due to conflict of interest. All this issues will end up limiting and negatively affecting the corporate profitability. The different research studies done to study the relationship between capital structure and performance have yielded inconsistent results. Although some studies have discovered a beneficial correlation between capital structure and performance, others have discovered the opposite (Paudyal, 2008).

The effect of financial structure on bank performance is still an issue that has to be addressed in research. Decisions about financial structure are among the most significant and crucial for any company. This study was prompted by a lack of clarity on research findings, as well as many contradicting findings. The goal of this study was to close this knowledge gap.

A. General Objective

To investigate the effect of financial structure on the financial performance of commercial banks in Kenya

B. Specific Objectives

- i. To determine the effect of deposits on the financial performance of commercial banks in Kenya
- ii. To investigate the effect of debt on the financial performance of commercial banks in Kenya
- iii. To investigate the effect of equity on the financial performance of commercial banks in Kenya

III. LITERATURE REVIEW

A. Theoretical Review of Capital Structure

The study was anchored by the Modigliani and Miller theory. Trade off Theory and Pecking Order Theory were the support theories. These theories aided in understanding the research topic

B. Modigliani and Miller Theory

The Modigliani–Miller model is a key component of economic theory, and it provides the foundation for modern capital structure thinking. Franco Modigliani and Merton Miller came up with the idea in 1958. They claimed that under the following assumptions, capital structure had no bearing on a firm's value: perfect capital markets, investor expectations that were all the same, a tax-free economy, and no transaction costs. They further asserted that firms would prefer entirely debt financing due to the tax shield advantage thereof.

The Modigliani-Miller theorem was created in a world where there were no taxes. In a world where loan interest is tax-deductible and other problems or issues are disregarded, the company's worth rises in relation to the amount of debt utilized. The added value is equal to the whole discounted value of future taxes avoided by obtaining debt capital instead of issuing additional share capital.

C. Pecking - Order Theory

This theory asserts that firms have a priority order in their financing needs. Firms would utilize the retained earnings first. If internal funding is not sufficient, firms will issue debt next, followed by equity.

According to the theory, businesses prefer funds that would be used to finance their enterprises in a specific order. The order of preference reflects the relative cost of the various funding options. Due to knowledge gaps between the firm and potential financiers, the comparative costs of borrowing fluctuate between the various financing arrangements (Abor, 2005).

Most managers concur that debts are issued when internal funds are not sufficient to fund their activities. In some cases, a company's inability to raise capital through debt has an impact on its decision to issue equity (Graham and Harvey, 2001). Because investors will view stock issuances adversely, firms will prefer to finance capital via retained earnings, then debt, and only after these choices have been exhausted, new equity issuances will be considered (Calabrese, 2011).

D. Trade off Theory

In 1977, Miller proposed the Tradeoff Theory for the first time. It revolves around the concept of a company evaluating the costs and advantages of funding sources before deciding how much debt and equity to use. Low profitable firms are likely to go bankrupt if they borrow more while, highly profitable businesses would prefer debt funding to boost their shareholder returns. This is because more debt in a company's balance sheet may result in further tax benefits.

This theory is frequently presented as a rival to the capital structure pecking order theory. One of the main goals of this theory is to explain why companies are frequently financed partially with debt and partly with equity. It claims that there is a benefit to debt financing, namely tax benefits, as well as a cost to debt financing, such as the costs of financial hardship, which include both bankruptcy and non-bankruptcy costs, therefore a company looking to maximize its overall value would consider this trade-off when deciding how much debt and equity to utilize for financing.

IV. CONCEPTUAL FRAMEWORK

The relationship between the financial structure variables and performance was analyzed in this study. The diagram below shows a pictorial representation of the relationship.



V. EMPIRICAL LITERATURE REVIEW

A. Deposits

Financial institutions make it easier to mobilize savings, diversify and share risks, and allocate resources. Deposits are monies placed in a financial institution e.g. a bank. Several studies have looked into the relationship between commercial bank deposits and performance in the past. Various studies have yielded divergent views. According to the findings of Naceur and Goiaed (2001), increasing bank deposits had

a beneficial influence on performance. In their study they also noted that the greater the number of deposit accounts, the more money banks had available for investment and lending.

Berlin and Mester (1999) conducted a study covering a period of 12 years i.e. from the year 1977 to 1989. The study findings was that deposits were beneficial to commercial banks as they supplemented banks funding options from equity and debt and that they protected the banks from economic shocks

Ratnovski and Huang (2009) conducted a study of Canadian banks. Their research findings showed that commercial banks that depended more on deposit accounts financing were better in terms of performance and financial health compared to large commercial banks that depended on debt financing. Deposits, among other variables, were found to have a favorable connection with ROA by Gul et al (2011). However, deposits had a negative connection with ROCE.

Dietrich and Wanzeried (2009) on a research study on commercial banks in Swiss found out that, increase in customer deposits had a nonsignificant effect on the bank's performance. They noted that it was difficult for banks to convert the deposit funds into assets that would generate more income.

Grigorian and Manole (2006) discovered less evidence of a relationship between capital and profitability. Furthermore, they discovered in their research that the potential to attract deposits at lower rates would result in higher return on assets and increased profitability. Due to intense competition for savings, banks are frequently required to supplement their financial requirements with more costly and less reliable funds, which have a direct impact on commercial bank earnings.

B. Debt

Many analysts define capital structure's debt component. Abor (2005) in his research studies found out that short- term liabilities and total liabilities had a considerably positive association with ROE, however long-term debt had a significantly negative link with ROE. As a result, an increase in long-term debt was linked to a decrease in financial performance since it was more expensive.

According to Deangelo (2007), when companies decide to seek out new investment opportunities, they take on greater debt. As a result, they diverge from the ideal capital structure level hence affecting their performance negatively.

Talberg et al, (2008) did a research study of firms in the New York Stock Exchange, USA. However, the research study did not include banks. The findings from the study showed a negative association between debt and firms profitability. These research findings were supported by Cheng et al. (2010).

Salim and Yadav (2012), on the other hand, utilized data from 237 firms registered on the Bursa Malaysian Stock Exchange between 1995 and 2011, and discovered that debt was negatively related to profitability. Gleason et al, (2000), on their study found out that total debt had a considerable negative impact on performance. As a result, excess debt has a detrimental impact on company performance. Overly indebted companies may discover that their creditors restrict their freedom of action in the long run. They are also compelled to pay exorbitant interest costs thus diminishing their profits.

C. Equity

Equity is comprised of ordinary shares, preference share capital and retained earnings. High growth firms at early stages will use less debt capital. This is because they are likely to use their retained earnings to finance their investment needs. Retained earnings reduce the risk of having to borrow from other sources. Managers are expected to act in the best interest of the firm and the shareholders who are the owners. Hence, managers should only adopt the financing strategy that will increase the value of the firm and the shareholders wealth.

According to Berger and Bonaccorsi (2006), organizational performance and capital structure are likely to be linked. They used data from US commercial banks. Retained earnings reduce the risk of having to borrow from other sources. This outcome supports assertions that earnings signified financial health to potential creditors and improved the firm's capacity to attract outside capital. According to Shubita and Alsawalhah (2012), firms with high profitability rely primarily on equity as their primary source of funding. Wilson et al. (2012) discovered that private equity- backed companies outperformed a matched sample of private and publicly traded companies.

Table 2.1: Operationalization of variables

Nature of Variable	Variable	Description	Measurement
Dependent	ROA	Return on assets	Net income / Total assets
Independent	TDTA	Deposits to Total Assets ratio	Total deposits / Total Assets
	DBTEQ	Debt to Equity ratio	Total Liabilities / Equity
	SFTA	Equity to Total Assets ratio	Equity / Total assets

VI. RESEARCH METHODOLOGY

A. Research Design

The method of carrying out a study is referred to as research design. Secondary data was acquired for the study from annual Central Bank Supervisory reports and publicly available financial statements of commercial banks over a ten-year period, from 2010 to 2019.

B. Data Processing and Analysis

The data gathered was evaluated using several descriptive statistical measures. For example; averages, maximum, minimum, frequencies, standard deviations and percentages. Microsoft Excel and the statistical descriptive tool (SPSS) were used to examine the data. The results were presented using tables and graphs.

The method of panel regression was applied. To analyze the panel data STATA 12 software was used. The following regression model was used to investigate the association between the bank's financial structure and its financial performance.

Regression model

Y1 = β0 + β1 X1 + β2 X2 + β3 X3 + εi...

Where:

Y1= Return on assets as a measure of bank i performance in time t

X1 = Total deposits to total assets ratio for bank i in year t

- X2 = Total liabilities to equity ratio for bank i in year t
- X3 = Equity to total assets ratio for firm bank in year t

 β 0, β 1, β 2, β 3, = Regression Coefficients

εi = error term

VII. DATA PRESENTATION AND ANALYSIS

A. Correlation Analysis

Pearson's correlations analysis was conducted at 95% confidence interval and 5% confidence level 2-tailed. The correlations matrix is as shown below:



Table 5.2: Combined Correlation Matrix – Model 1 (ROA)					
		TD/TA	DBT/EQ	SF/TA1	
Pearson Correlation	ROA	0.155	344**	.433**	
Sig. (2-tailed)		0.217	0.000	0.000	

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

From Table 5.2 Equity represented by (SF/TA) $r = 0.433^{**}$. Equity had a significant positive correlation with performance. Deposits on the other hand represented by (TDTA) had a weak positive correlation with ROA r = 0.155 which was not significant. One variable was negatively correlated with ROA, namely Debt represented by (DBTEQ) = -0.344^{**} . Debt (DBTEQ) had the highest negative correlation with ROA which was statistically significant. $R = -0.344^{**}$ (P value < 0.01)

B. Multicollinearity

Multicollinearity affects the regression model and its lack, thereof, is a key assumption for regression. A Multicollinearity test was conducted to establish if the independent variables were correlated. A Tolerance value of less than .10 shows possible multicollinearity.

Table 4.5:				
				_
		Collinearity	Statistics	
Model	(Constant)	Tolerance	VIF	
1	TD/TA	0.819	1.22	
	DBT/EQ	0.681	1.467	
	SF/TA1	0.682	1.467	
a. Depend	lent Variable: RO	A		

Table 4.5 results above shows that the tolerance values of each of the independent variables namely; the total deposits to total assets (TDTA), the total debt to total equity (DBTEQ), and Shareholders funds (equity) to total assets (SFTA) ratios respectively was .819; .681; & .682; All this values were not less than .10; therefore we did not violate the multicollinearity assumption.

This is also supported by the VIF value which is 1.220; 1.467; & 1.467 respectively, which is below the cut –off of 10. This shows lack of multicollinearity amongst the independent variables.

C. Independent Errors

In order to meet the assumption of independent errors we conducted a Durbin – Watson test. The Durbin-Watson values can range from 0 to 4. If the Durbin-Watson value is less than 1 or greater than 3, it is considered significantly different from 2, indicating that the assumption has not been met.

Table 4.7: Durbin-Watson - Model 1

Model Summary					
Model	Durbin-Watson				
1	1.109				
a. Predictors: (Constant), SF/TA, TD/TA, DBT/EQ					
b. Dependent Va	ariable: ROA				

From Table 4.7 above, we can see that our data met the assumption of independent errors (Durbin-Watson value = 1.109).

D. Estimation Technique

The Hausman and the Breusch-Pagan lagrangian multiplier tests were used to choose the appropriate model that would produce accurate estimations for the research. The results of the test are shown in Table 4.13 below:

Table 4.13: Hausman Test

Model	Chi-	Probability
	square	
	Stat	
Model 1	74.92	0.000

If P is < 0.05 (i.e. significant) use fixed effects.

Table 4.13 shows the results of The Hausman test for the model. It reveals a Chi-square value of 74.92 alongside a probability value of 0.0000. Hence, from the results, we can conclude that the fixed and random effect estimates differ significantly. We therefore reject the null hypothesis in favor of the alternative hypothesis.

The random effect estimator is not appropriate because the random effects are probably correlated. As a result, the fixed effect is the most reliable predictor for the research.

Breusch-Pagan lagrangian multiplier test

Table 4.14: Breusch-Pagan lagrangian multiplier test for random effects

Models	chibar2 (01)	Prob > chibar2	
Model (ROA)	88.53	0.000	

As per Table 4.14 above, the p values for the model are all less than 0.05. This implies that the fixed effects model is better for the panel data analysis, hence the random effect model should be rejected and the analysis should be based on fixed effects estimates.

The Fixed effects Model was used to do panel fixed effect regression analysis using STATA 12 software utilizing two techniques.

- 1) Covariance model within estimator and
- 2) Individual dummy variable model.

Table 4.15: Fixed effects for Model (ROA)

1) Fixed effects: n entity-specific intercepts (using xtreg)

Fixed-effects (within) regression	Number of obs	=	335
Group variable: BankNo	Number of groups	=	34
-	Obs per group:		
	min	=	8
R-sq: within $= 0.0643$	avg	=	9.9
between $= 0.1207$	max	=	10
overall = 0.0916	F(3,33)	=	4.5
	Prob > F	=	0.0094

corr(u_i, Xb) = 0.0570

(Std. Err. adjusted for 34 clusters in BankNo)

		Robust Std.				
ROA	Coef.	Err.	Т	P>t	[95% Conf.	Interval]
TDTA	0.05951	0.0294047	2.02	0.051	-0.0003133	0.1193353
DBTEQ	-0.0655	0.0254912	-2.57	0.015	-0.1173968	-0.0136722
SFTA	0.10486	0.0298712	3.51	0.001	0.0440831	0.1656301
_cons	-3.2966	2.308911	-1.43	0.163	-7.99411	1.400919
sigma_u	1.98697	()			C	
sigma_e	1.49964					
Rho	0.6371	(fraction of va	riance du	e to u_i)		

2) Individual dummy variable model.

Table 4:16: Fixed Effects using least squares dummy variable model (LSDV)

Linear				Number of		225
regressio	n			obs	=	335
				F(36, 298)	=	26.66
				Prob > F	=	0.0000
				R-squared	=	0.6841
				Root MSE	=	1.4996
ROA	Coef.	Robust	Т	P>t	[95% Conf.	Interval]
		Std. Err.				_
TDTA	0.05951	0.0261109	2.280	0.023	0.0081258	0.1108961
TDTA DBTEQ	0.05951 -0.0655	Std. Err. 0.0261109 0.0761589	2.280 -0.860	0.023 0.390	0.0081258 -0.2154118	0.1108961 0.0843428
TDTA DBTEQ SFTA	0.05951 -0.0655 0.10486	0.0261109 0.0761589 0.0484618	2.280 -0.860 2.160	0.023 0.390 0.031	0.0081258 -0.2154118 0.009486	0.1108961 0.0843428 0.2002272

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2	-0.9378	0.193142	-4.860	0.000	-1.317936	-0.557746
3	1.71799	0.3724314	4.610	0.000	0.9850592	2.450917
4	0.27854	0.4294962	0.650	0.517	-0.5666881	1.123771
5	-0.2434	0.4011239	-0.610	0.545	-1.032746	0.5460425
6	-1.2472	0.3630455	-3.440	0.001	-1.961639	-0.5327235
7	-1.1777	0.3026885	-3.890	0.000	-1.77335	-0.5819943
8	-0.1743	0.3105595	-0.560	0.575	-0.7854733	0.436862
9	-3.5748	0.5659942	-6.320	0.000	-4.688692	-2.460987
10	1.09378	0.51064	2.140	0.033	0.0888658	2.098701
11	-0.7845	0.3026534	-2.590	0.010	-1.380106	-0.1888881
12	-2.9937	0.5627418	-5.320	0.000	-4.101178	-1.886275
13	-2.0998	0.4037797	-5.200	0.000	-2.894432	-1.305191
14	-5.5321	0.5866392	-9.430	0.000	-6.686538	-4.377577
15	-1.5751	0.4109517	-3.830	0.000	-2.383847	-0.7663771
16	-2.9811	0.7374218	-4.040	0.000	-4.432312	-1.529884
17	-3.7484	0.5046876	-7.430	0.000	-4.741649	-2.755243
18	-2.1283	0.8102852	-2.630	0.009	-3.722933	-0.5337215
19	-3.7591	0.3891292	-9.660	0.000	-4.524932	-2.993354
20	-2.6952	0.446719	-6.030	0.000	-3.574283	-1.816036
21	-3.41	0.4714796	-7.230	0.000	-4.337844	-2.482141
22	-1.7498	0.3790233	-4.620	0.000	-2.495691	-1.003888
23	-3.5297	0.9180265	-3.840	0.000	-5.336325	-1.723053
24	-4.2877	0.495197	-8.660	0.000	-5.262219	-3.313166
25	-1.7757	0.3339054	-5.320	0.000	-2.432792	-1.11857
26	-4.8482	0.5441844	-8.910	0.000	-5.919132	-3.777269
27	-3.263	0.3109267	-10.490	0.000	-3.874898	-2.651118
28	-2.1616	0.685314	-3.150	0.002	-3.510292	-0.8129556
29	-3.6401	0.6116449	-5.950	0.000	-4.843819	-2.436438
30	-6.4682	1.049867	-6.160	0.000	-8.53427	-4.402087
31	-5.5901	0.8860623	-6.310	0.000	-7.33379	-3.846326
32	-3.8809	0.5876982	-6.600	0.000	-5.037441	-2.724312
33	-4.6873	0.5997197	-7.820	0.000	-5.86749	-3.507046
34	-4.8806	0.6227229	-7.840	0.000	-6.106095	-3.655112
cons	-0.7827	2.50584	-0.310	0.755	-5.714091	4.148676

Table 4.15 & Table 4.16 above yielded the same regression coefficient results.

Interpreting the regression coefficients:

a. Deposits

The coefficient of deposits was 0.05951. This meant that with a unit increase in deposits (TDTA), the performance of commercial banks increased by 0.05951 as assessed by ROA i.e. holding all the other factors constant. P > t = 0.023

The results also show that deposits had a significant effect on performance.

Our findings are in line with those of Gul et al (2011), who found a positive association between deposits and ROA. Other studies that are supported by this study include Naceur and Goiaed (2001).

However, the above research findings are in contrast to some other research studies e.g. Dietrich and Wanzeried (2009) and Nafula (2003) who on their study found out that customer deposits had a significant and negative effect on earnings of banks.

b. Debt

The coefficient of debt was - 0.0655. This meant that with a unit increase in debt (DBTEQ), the performance of commercial banks as measured by ROA declined by 0.0655 holding all other factors constant. P > t = 0.390

From the study's findings we can conclude that debt a negative but non –significant effect on commercial banks performance.

Our findings corroborate those of other earlier research, such as Nassar (2016), Uremadu, and Onyekachi (2019) who found out that Debt had a negative and non- significant influence on performance.

These research findings are however in conflict with those found by Gill, Biger, and Mathur (2011), who discovered that using a higher share of debt in the capital structure had a positive link with profitability.

c. Equity (SFTA)

The regression coefficient was 0.10486. This implies that holding all other factors constant, a one-unit increase in equity (SFTA) enhanced the performance of commercial banks as assessed by ROA by 0.10486.

At the 95 percent confidence level, P>t = 0.031, which is less than 0.05. This implies that equity had a significant and favorable impact on performance. Hence, the study revealed that shareholders' funds significantly predicted the banks performance (β = 0.10486, p<.05);

Our study is consistent with the findings of Wilson et al (2012); Shubita and Alsawalhah (2012); Olalekan and Adeyinka (2013) and Ayaydin and Karakaya (2014) who noted that increase in bank equity had a considerable favorable influence on bank performance.

Table 4.21: Panel Regression Model Summary



The financial structure was tested using panel regression modelling to see if it predicted the performance of commercial banks. The regression model's findings revealed the following:

Model 1: ROA

The predictors explained 68.41% of the variance (R2= 0.6841, F (36, 298) = 26.66, P< .005. The model was also significant since the P value was 0.0000, which was less than the significant figure.

Recommendations

Under each specific objective, the following recommendations have been made based on these research findings.

A. The effect of deposits on Kenyan commercial banks' financial performance

Deposits were statistically significant in the model. The regression results showed that an increase in deposits would improve the banks financial performance significantly. It is recommended to bank managers to look for ways to attract more deposits, especially deposits for longer periods of time. These deposit funds can be used to finance their investment activities. The available deposited funds can also be issued as loans to customers. Hence the bank can generate loan interest which forms a significant portion of commercial banks income. This will in effect enhance their financial performance.

B. The effect of Debt on Kenyan commercial banks' financial performance

Debt had a negative effect on performance. This indicated that if the debt-to-equity ratio in the capital structure surpasses a cer-

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tain level, the firm's performance suffers. Firms should therefore, on average, maintain lower levels of debt. As a result, it is recommended to bank management that they should maintain a good debt-to-equity ratio.

C. The effect of equity on Kenyan commercial banks' financial performance

The correlation results suggested a moderately positive relationship between equity and commercial bank performance. The regression coefficient results also revealed that bank's performance would improve for every unit change in equity. Equity variable was also statistically significant. Based on the foregoing findings, bank management is encouraged to prioritize equity financing over debt financing when making critical financing decisions. It hough a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions. Authors are strongly encouraged not to call out multiple figures or tables in the conclusion—these should be referenced in the body of the paper.

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References

- [1] Ayaydin, H., & Karakaya, A, (2014). "The effect of bank capital on profitability and risk in Turkish banking". International Journal of Social Science, 5(1), 252-271.
- [2] Antoniou, A. Guney & Paudyal, K. (2008), "The Determinants of Capital Structure, Capital Market Oriented versus Bank-Oriented Institutions", Journal of Financial and Quantitative Analysis, vol 43, pp.59
- [3] Abor J. (2005). "The Effect of Capital Structure on Profitability: Empirical Analysis of Listed Firms in Ghana", Journal of Risk Finance, 6 (5), 438–445.2.
- [4] Berger, A. and E. Bonaccorsi, (2006). "Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry", A Journal of Banking and Finance, vol 30
- [5] Berlin, M and Loretta J. (1999) "Deposits and Relationship Lending," Review of Financial Studies, Society for Financial Studies, vol. 12(3), pages 579-607.
- [6] Calabrese, T (2011). Testing Competing Capital Structure Theories: Journal of Public Finance.
- [7] Cheng, X., Degryse, H. (2010). "The Impact of Bank and Non-Bank Financial Institutions on Local Economic Growth in China". Journal of Finance vol. 37, 179–199.
- [8] Dietrich, A. and Wanzenried, G (2009). "Determinants of bank profitability before and during the crisis: Evidence from Switzerland", Journal of International Financial Markets, Institutions and Money, vol. 21(3), pp 307-327
- [9] DeAngelo, H, (2007). "Capital structure; payout policy, and financial flexibility": Working papers series, University of Southern California, No. 916093.
- [10] Gill, A., Biger, N, & Mathur, N (2011). "The effect of capital structure on profitability: Evidence from the USA". International Journal of Management, 28(4), 3.
- [11] Gul, S., Irshad. F, & Zaman. K, (2011), Factors affecting bank profitability in Pakistan, Romanian Economic Journal, vol. 14, pp. 61.
- [12] Grigorian, D. A., & Manole, V. (2006). "Determinants of commercial bank performance in transition periods" A Comparative Economic Studies, vol. 48, pp 497–522
- [13] Graham. J.R, & Harvey, C.R (2001). "The Theory and Practice of Corporate Finance", Journal of Financial Economics, vol. 60 pp. 187-243
- [14] Gleason, K, & Mathur, I (2000). "The interrelationship between culture, capital structure, and performance", Journal of Business Research, vol. 50(2) pp. 185-191.
- [15] Nassar, S., (2016). "The Impact of capital structure on Financial Performance of the firm: Evidence from Borsa Istanbul" Journal of Business and Financial Affairs, No. 5 (2),
- [16] Nafula, (2003). "Bank Portfolios and Bank Earnings in Kenya: An Econometric Analysis". Kenya Institute for Public Policy Research
- [17] Naceur, S.B. and Goaied M. (2001). The determinants of the Tunisian deposit banks performance, Applied Financial Economics Vol. 11 Issue 3, pp 317-319
- [18] Olalekan, A. and S. Adeyinka (2013). "Capital Adequacy and Banks' Profitability: An Empirical Evidence from Nigeria", International Journal of Contemporary Research, p. 87-93
- [19] Onaolapo & Kajola (2010). "Capital Structure and Firm Performance: Evidence from Nigeria", European Journal of Economics, Finance and Administrative Sciences, vol. 25, pp 70-82
- [20] Ratnovski, L., & Huang, R. (2009). "Why are Canadian Banks more resilient; IMF working papers.
- [21] Ross, S. A., Westerfield, R. W., Jaffe, J., & Kakani, R. K. (2009). Corporate Finance, Tata McGraw-Hill Edition 2009, 8th Edition.
- [22] Salim, M., & Yadav, R. (2012). "Capital structure and firm performance of listed firms in Malaysia", Journal of Social and Behavioral Sciences, vol. 65, pp. 156-166.
- [23] Shubita, M. F & Alsawalhah, J. M. (2012). "The relationship between capital structure and profitability", Journal of Business and Social Science, vol. 3(16), pp. 104 122
- [24] Shoaib, A. (2011). "Measuring performance through capital structure: Evidence from banking sector of Pakistan". African Journal of Business Management, 5(5), 1871-1879.
- [25] Scott S.M. & Timothy W. K. (2006). Management of Banking, (6th ed.). Pre-press company, Inc.
- [26] Talberg, M., Winge, C., Frydenberg, S. and Westgaard, S. (2008). Capital Structure across Industries, Journal of the Economics of Business, 15(2).
- [27] Wilson, N., Wright, M., Siegal, D. & Scholes, L. (2012). 'Private equity portfolio company performance during the recession', Journal of Corporate Finance, Vol. 18, No. 1, pages 193205.