



www.strategicjournals.com

Volume 11, Issue 2, Article 065

**CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF LISTED BANKS AT THE NAIROBI SECURITIES
EXCHANGE MARKET: A CASE OF COMMERCIAL BANKS IN KENYA**

Nicodemus Okumu Anam & Moses Wekesa Wanjala, PhD

CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF LISTED BANKS AT THE NAIROBI SECURITIES EXCHANGE MARKET: A CASE OF COMMERCIAL BANKS IN KENYA

¹ Nicodemus Okumu Anam & ² Moses Wekesa Wanjala, PhD

¹ Master Student, Jomo Kenyatta University of Agriculture and Technology, Kenya

² Lecturer, Jomo Kenyatta University of Agriculture and Technology, Kenya

Accepted: May 15, 2024

DOI: <http://dx.doi.org/10.61426/sjbcm.v11i2.2970>

ABSTRACT

The main goal of every commercial bank is to operate profitably to maintain stability and sustainable growth. Capital structuring is viewed as critical drivers for financial performance of the banking institution. An appropriate capital structure is a critical decision for any business organization to be taken by business organization for maximization of shareholder's wealth and sustained growth. The purpose of this study was to examine how capital structure influences financial performance of NSE listed firms in Kenya. The major focus of this study was to investigate firms' specific factors such as working average cost of capital, firm leverage, cash flow, and control and their effects on financial performance of NSE listed banks in Kenya. The researcher adopted descriptive research design to achieve this aim. The study targeted eleven banks listed at the NSE and they were included in the sampling frame if they had a five-year financial report. Document review was used for collecting secondary data from 2011-2015 annual reports. Descriptive statistics (mean and standard deviation) and multiple regression analysis and statistical package for social scientists (SPSS) computer software (version 20) was used to analyses data of the banks specific factors and financial performance, measures return on asset (ROA) of the firms over a period of five years. The study findings ascertained that increasing unit levels of cost of capital, financial leverage, cash flow, and control have positive effect on the financial performance of firms listed at the Nairobi Securities Exchange, Nairobi. This study, therefore, recommends that commercial banks listed at the Nairobi Securities Exchange need to reassess their capital structuring so that they can realise better financial performance. This study provides a basis for enhancing a strong capital structure. The findings of this study may guide building strong capital structure, specifically on cost of capital, financial leverage, cash flow, and control. In lieu of these determinants of capital structure, this study offers a basis to improving financial performance.

Key Words: Capital Structure, Financial Performance

CITATION: Anam, N. O., & Wanjala, M. W. (2024). Capital structure and financial performance of listed banks at the Nairobi securities exchange market: a case of Commercial banks in Kenya. *The Strategic Journal of Business & Change Management*, 11 (2), 1077 – 1089. <http://dx.doi.org/10.61426/sjbcm.v11i2.2970>

INTRODUCTION

Capital structure (CS) alludes to a blend of an array of enduring sources of resources and equity shares including assets and retain earnings of an organization. They uncovered the circumstances or conditions under which CS is significant or inappropriate to the fiscal presentation of the quoted companies. Brigham and Ehrhardt (2018) bear witness to that capital structure reflects how an enterprise funds its strategies that may both be through commitment, esteem capital or the combination of both. As indicated by Myers (2018), there was no standard hypothesis on the debt to equity decision however noticed that there were a few speculations that attempted to clarify the capital structure blend. Myers (2018) referred to the tradeoff hypothesis which expresses that organization look for obligation levels that adjust the tax cuts of extra obligation against the expenses of conceivable money related trouble.

According to La Porta et al (2019) and also Dinx I (2018) Findings from various studies on the poor performance of government-owned banks, especially in developing countries, which would result into privatization to improve performance by boosting efficiency of financial intermediation are Mixed across the globe (cull, Clarke, Shirley and megginson,2018). According to Harber (2019) countries like Mexico, Czech Republic and to a lesser extent.

Efficiency is a key concept for financial institutions (Cinca et al, 2019). In general efficiency can be seen to have a direct relationship with the performance. Measurement of profitability of banking institutions serves important purpose as it helps to benchmark the relative performance of an individual bank against the industry as the "best practice" bank(s) and evaluate the impact on these institutions. Most studies on performance in terms of profitability of financial institutions have addressed the issue of efficiency either in terms of scale and scope or in terms of x-efficiency or both. Scale efficiency in the banking

services is less than the sum of banks stand-alone operations (Kwan & Eisenbeis, 2018). According to Limam (2019) Scale efficiency addresses the Question whether a firm is operating at the minimum of its long-run average cost curve.

In 2018, the deposits stood 900 billion shillings compared to the 290 billion shillings that was recorded in 2018 which is an improvement of 130 percent. In 2018, Kenya commercial Bank (KCB) reclaimed its place as the biggest bank in the country after trailing Barclays Bank since 2018. KCB is now the leading bank in assets with the largest branch network in the country. It also has the largest customer deposits in the sector. The bulk of KCB's growth has been witnessed mostly over the past five years and the bank's CEO (Martin O Oduor) believes that they have only just set the base for future growth. Many banks that were previously making losses due to their huge non-performing loans portfolio have turned around and performance in the banking sector has tremendously increased over the past ten years from just Ksh 5 billion in 2019 to over Kshs 44 billion in 2018. The results were that all 43 banks in the country reported.

Early commercial banks were limited to accepting deposits of money or valuables for safekeeping and verifying coinage or exchanging one jurisdiction's coins for another's. By the 17th century most of the essentials of modern banking, including foreign exchange, the payment of interest, and the granting of loans, were in place. It became common for individuals and firms to exchange funds through bankers with a written draft, the precursor to the modern cheque.

The importance of bank performance can be appraised at the micro and macro levels of the economy. At the micro level, profit is the essential prerequisite of a competitive banking institution and the cheapest source of funds. It is not merely a result, but also a necessity for successful banking in a period

of growing competition on financial markets. Management has to achieve profit, as the essential requirement for conducting any business (Bobáková, 2019). At the macro level, a sound and profitable banking sector is better able to withstand negative shocks and contribute to the stability of the financial system.

Profitability at both micro and macro levels has made researchers, academicians, bank managements and bank regulatory authorities develop considerable interest on factors that determine bank performance (Athanasoglou et al., 2019). The group of Bank specific determinants of performance involves clientele, competition, sources of funds, product differentiation and leadership. The second group of determinants relates performance to the macroeconomic environment within which the banking system operates which will include real GDP growth, effective tax rates and yearly change of population. But this study will attempt to identify the relationship between highlighted variables and bank performance.

Statement of the Problem

According to the Central Bank of Kenya, the performance of commercial banks in Kenya has been improving since 2015, and this is evident from the expanding size gross loans of Ksh. 2.17 trillion, a deposit base of 2.57 trillion, and total assets of 3.60 trillion (CBK, 2015). However, despite the improvement in the performance of these banks, capital structure has greatly influence the financial performance of these banks (Kamau & Were, 2013). According to CBK Bank Supervision Annual Report of 2015, commercial banks in Kenya may sometimes fail to make enough return on equity (ROE) or return on investment (ROI) because of decline in earnings and escalating expenses, in spite of all the headlines on commercial banking profitability. Financing decision may lead to reduction or loss of value of strategic assets (Adekunle & Sunday, 2010). Financial reports of NSE listed firms considered for this study, show that their debt financing mainly comprises of short-term

debts (Kajola, 2010). However, external financing for NSE listed firms exceed their investments, thus failing to put into account that excessive external financing results in overleverage, which implies that the business is exposed to extensive obligations to external investors, who are likely to disrupt firms' operations as well as their financial returns.

Variables that explain the capital structures in developed nations are also relevant in the developing countries irrespective of differences in institutional factors across these developing nations. However, in Kenya as to the knowledge of the researcher there were few papers, which relates with this title these are Magara (2012), who investigated capital structure and its determinants at the Nairobi Securities Exchange. Mwangi (2010) investigated empirically the relationship between capital structure and financial performance of firms listed at the Nairobi Stock Exchange. The concern was the dwindling financial performance of the NSE listed companies (Nairobi Securities Exchange, 2015).

Those previously conducted research in Kenya were a few investigated determinants of capital structure, but the aim this research was to investigate effects of capital structure on the financial performance of the NSE Listed firms. This study attempted to reduce the gap by analyzing the effects of capital structure determinants on performance specifically in the NSE listed companies. Many NSE listed companies do not know explicitly the specific determinants that affect their financial performance, which leading them to make informal decisions regarding their financial mix that are suffer to error (Osoro, 2014). Therefore, the researcher attempt to clarify some of the key firm characteristics that managers need to consider when setting their optimal capital structure. In light of above, there is no extensive of empirical studies in Kenya concerning the relationship between of capital structure and financial performance in the context of the Kenyan NSE market, which is, motivated the researcher to put his own contribution on what

factors affect the financial performance of NSE listed companies. While taking in to consideration the insufficient empirical investigation into the factors affecting NSE listed firms' financial performance, the researcher attempted to work on such untouched empirical evidence in the country.

Objectives of the Study

The aim or general objective of this study was to assess capital structure and financial performance of NSE listed banks in Kenya by using commercial banks in Kenya as the case study. The following were specific objectives derived from the aim of this study.

- To determine effect of cost of capital on financial performance of banks listed at the NSE, Kenya
- To establish the effect of financial leverage on financial performance of banks listed at the NSE, Kenya
- To assess the effect of cash flow on financial performance of banks listed at the NSE, Kenya
- To evaluate the impact of low retained earnings on financial performance of banks listed at the NSE, Kenya

Research Hypotheses

The study was to test five null hypotheses:

- H_{0_1} : Cost of capital has no significant effect on financial performance of Commercial banks in Kenya.
- H_{0_2} : Financial leverage has no significant effect on financial performance of Commercial banks in Kenya.
- H_{0_3} : Cash flow has no significant effect on financial performance of Commercial banks in Kenya.
- H_{0_4} : Low retained earnings have no significant effect on financial performance of Commercial banks in Kenya.

LITERATURE REVIEW

Theoretical Literature

Theory of Risk and Return

According to Harry Markowitz (2019) first consideration relating to bank performance concerns the concepts of risk and diversification. Shareholders balance their appetite for maximizing expected profits and minimizing costs with the amount of risk they are willing to take. Abstracting from speculative motives, shareholders are generally assumed to be indifferent to the distribution of profits, receiving a return on their investment in the bank either through an increase in the bank's share price or through dividends received. If all banks share the same risk-return preferences, or if the risk-return relationship can be described by some relatively simple homothetic continuous function, then there is no serious problem with the fact that we do not know how to control for a bank's risk preferences. This is different, however, in a situation where some banks are highly risk-averse and not well diversified. Such banks have different preferences, forego high-risk, high-return opportunities and optimize towards an altogether different maximum performance.

New products come about due to new innovations, which are driven by the urge to realize more profits. This leads to the innovation of personal loans that were a fairly new phenomenon in Kenyan Banking industry. A review of the latter day innovations on development and improvements of the personal loan products would lead to determination of the factors influencing performance in the banking industry. Attitude towards success and profit making intentions is to try what used to be very difficult to obtain (Bagozzi et al 2018) such that even the banking industry is being offered in the streets through personal selling by bank employees to accelerate growth. The literature available and reviewed was based on research carried out in Europe and Asia. The purpose of this study is to find out whether it would

come up with similar findings based on Kenyan market context.

Contingency Planning Theory

According to Hinson and Kowalski (2018), contingency planning also known as business continuity planning which states that risks cannot be totally eliminated in practice residual risks always remain the bank's effort to avoid, prevent or mitigate them incidents will still be in particular situations, combination of adverse events or anticipated through vulnerabilities may conspire to bypass or overwhelm even the best information which controls design to ensure confidentiality.

The very word contingency implies that the activities and resources required the following major incidents or disasters are contingent (dependent) on the incidents and disasters that actually unfold. In this sense, contingency planning involves pre-unexpected and planning for the unknown. The basic purpose of contingency planning adverse consequences or impacts of incidents and disasters. This makes the operating banks to plan well for the future thus smooth running of the banks effectively.

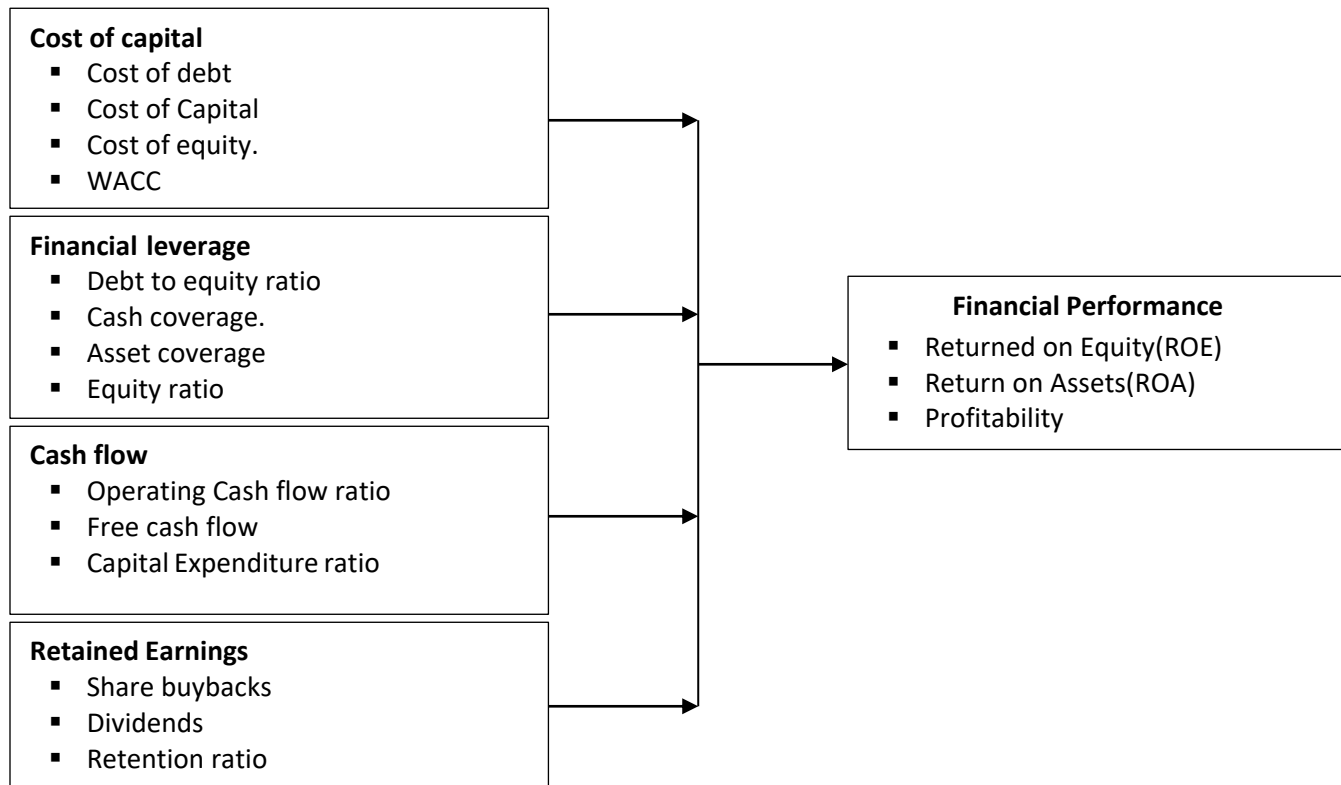
Trade-off theory of Capital Structure and Taxes

Myers (2019) study on capital structure attributed from Modigliani and Miller which was based on perfect market. Myers wanted a theory of real market situation where there are taxes, cost of transaction and competition. Tradeoff theory iterates that a weak organization is depends totally on financial institution

for running of their organization. In commercial banks most banks have been working on loan and grants from the Kenya government in order to revive their operation. There is need to fix their capital structure since most farmer owe most these banks large debts. Youth organization entering into the market according to the theory must be able to weigh on the capital structure to avoid bankruptcy.

Hence should mix their capital structure keeping in mid the banks obligation to pay off debt or any credit facility they sought in the process of their business. Inside the tradeoff hypothesis, there is an obligation "pecking-order" with bank obligation being linked to the market risk because of the lower inferred liquidation costs. Precisely while the financial institution holds all ex-post bargaining power, the pinned for level of dedication examine shields may be talented the use of in reality financial institution commitment (Modigliani & Miller, 2018). In conclusion, this theory was relevant in that it foretells that firms with more substantial resources and more payable revenue ought to have soaring liability ratio and companies through new intangible assets, whose purpose will fade away in case of bankruptcy, ought to depend more on value financing. Under exchange off hypothesis, the organizations with high development potential outcomes ought to obtain less on the grounds that they will probably lose an incentive in money related misery. Debt ratio, debt to equity ratio and long term to total assets are provided by the theory as explained by Myer.

Conceptual Framework



Independent Variable

Dependent Variable

Figure 1: Conceptual Framework

Empirical review

The existing commercial banks need financial, managerial and operational restructuring if they are to sustain in the new competitive environment. The commercial banks need to be financially sound. This needs among other things the redefinition of its lending policy. The accumulation of debts by the commercial banks borrowers may signify one or both of the following things: That the borrowers are facing financial difficulties as a result of many factors including corruption, mismanagement, irresponsibility and the like. Another reason may be that the interest rate charged is relatively high than the return from their business activities. Repayment of the principal and the interest rate may therefore prove to be difficult

taking into account the very short lending period. Financial resources from the commercial banks should be provided only to proven economically sound commercial enterprises.

The commercial Banks should adjust and adapt themselves to the environment in which they are now operating if they are to avoid difficulties in increasing savings deposits and the volume and quality of the financial resources to be allocated. Some of the immediate measures to be taken may include: Commercial banks have to simplify their deposit and lending procedures. Reducing and simplifying the amount of paperwork involved in savings mobilization and loans requesting, developing simple systems for collecting small-scale savings deposits, reducing

delays, introducing greater flexibility in repayment schedules etc. all these measures may contribute toward making the institution more accessible to potential savers and investors.

Transparency of management procedures in the commercial banks is also essential to reinforcing client confidence. Through increased understanding of how the commercial banks are managed, clients can contribute more towards their development and targets. Indeed, involving clients in management activities is likely to increase the efficiency of the commercial banks and the number of potential clients. In addition to their intermediation function, commercial banks could offer guidance and assistance services to their clients.

In this way they serve as efficient channels distributing information on production and marketing techniques and procedures, prices, markets etc. this is to say an economic role would be added to their financial ones. Of great importance is the central question of how the commercial banks may influence the level of saving and promote viable investments to be financed by the mobilized savings. On one hand this calls for a reconsideration of the factors that influence that are responsible for changes in the level of savings.

Among the multitude factors that influence the level of domestic savings, interest rates for deposits has been found in many studies to have a very weak influence on the level of domestic savings. In times of severe inflation, the level of savings may even drastically drop. This is due to the fact that returns in savings becomes negative in real terms, prompting potential savers to opt for other ways of using their funds. Deposit rates appear therefore not to be a principal stimulant of savings.

METHODOLOGY

This study used descriptive research design. All the NSE listed banks were included in the sample frame if they had five years' annual report. The target

population for this study included Eleven commercial banks listed at the NSE, Kenya. Document review was used for collecting data from 2011-2015 annual reports. Secondary sources of data were used in this study to make sure that it is accurate and reliable. The annual financial data was collected from the NSE, and financial reviews and annual reports and statement of accounts and covered a period of 5 years (2011-2015). The research instrument was piloted in a public company that is not part of the sample, but is similar to the sample. Simple random sampling technique was used that is similar to the actual sample used in this study. The reliability of this study survey instrument was assessed using Cronbach's Alpha. Data were analyzed using descriptive statistics (mean and standard deviation) and multiple regression analysis and statistical package for social scientists (SPSS) computer software (version 20) was used to analyse data.

FINDINGS

Descriptive Analysis

The study sought to investigate firms' specific factors, including cost of capital, firm leverage, cash flow, and control and their effects on financial performance of NSE listed commercial banks in Kenya. The researcher adopted descriptive research design to achieve this aim. A document review was conducted to gather secondary data from eleven commercial banks listed at the NSE, covering a five-year (2011-15) financial report. The following table 1: provides a summary of the descriptive statistics of the study variables. Cost of capital has the highest mean of 0.132, followed by financial leverage 0.129, cash flow 0.105, and finally control 0.086. The mean for the dependent variable ROA stands at 0.12, that is, the average return on assets for the 11 banks in a time period of five years (2011-2015). The corresponding standard deviation was significantly low for cost of capital (1.47) and financial leverage (1.36), thus a clear indication that their data were concentrated close to the mean. Cash flow and control had higher standard deviation of

0.154 and 0.158, and thereby indicating that the data was far spread apart from the mean. ROA had the lowest standard deviation of 0.056 and therefore a clear indication it has its data closely spread towards the mean.

The study results established that cost of capital has the highest influence on financial performance, followed by cash flow, financial leverage, and control. The variables have significant statistical means, an indication that they significantly affect financial performance. The results agree with the findings obtained by Magara (2012) that there was a positive significant relationship between the cost of capital,

firm size, tangibility and growth rate and the degree of leverage of the firm. The findings are also in conformity with those of Mwangi (2010), which established that a strong positive relationship exists between leverage and cash flow, return on equity, liquidity, and return on investment. The results support those of Ongore and Kusa (2013) that cost of capital as a significant determinant of financial performance of commercial banks in Kenya. However, this study discredits Cooper and Schindler (2014) that negative effect exists between capital structure and financial performance.

Table 1: Descriptive Statistics

	Statistic	Mean	Std. Error	Std. Deviation
				Statistic
Cost of Capital	.132		.020	.147
Financial leverage	.129		.012	.136
Cash flow	.105		.037	.154
Control	.086		.038	.158
ROA	.012		.008	.056

Source: Research Data (2016)

Reliability and Validity of Data

In order to test data reliability, the researcher adopted a Cronbach's alpha or the co-efficient of alpha to measure internal reliability. The tool was

deemed appropriate as a variance measure of all subjects and variances related to interactions between subjects and items. The following results in table 2: present the scores obtained from testing of Cronbach's alphas.

Table 2: Reliability Statistics

Variable	Cronbach's Alpha	Number of items
Cost of Capital	.823	9
Financial Leverage	.812	8
Cash flow	.746	8
Control	.924	7

The scores shown; cost of capital $\alpha = 0.823$, financial leverage $\alpha = 0.812$, cash flow $\alpha = 0.746$, and control $\alpha = 0.924$ sufficiently confirm data reliability of independent variables. The scores sufficient since they have values above the 0.60 minimum level acceptable for a coefficient of alpha (Cooper & Schindler, 2014).

Validity of this research instrument were tested to show whether the instrument measured what it was supposed to measure. One of the ways used to achieve face and content validity was by adopting research instrument employed by researchers (Mugenda & Mugenda, 2003). Due to variations in socio-economic context, the researcher modified the instrument and sent to experts in both academia and

banking industry for vetting. The academician expertise constituted of individuals who are versed with financial matters and survey design. The research supervisor guided the researcher in designing the data collection form. The comments consisted of the instrument ability to collect the necessary data and its ability to answer research questions, whether the questions presented a good measure of constructs, and whether something else could be added to the survey to get the necessary data. Experts from the banking industry and Nairobi Securities Exchange (NSE) reviewed the questions. The data collection form was used in a pilot and feedback gathered from the targeted respondents were employed to refine the

instrument for the main study.

Multiple Regression Analysis

The study adopted a multiple regression analysis to establish the strength as well as the direction of cost of capital, financial leverage, cash flow, and control on financial performance of commercial banks listed at the Nairobi Securities Exchange. The model summary table 3: provides a correlation co-efficient (R) of 0.606, co-efficient of determination (R^2) of 0.819 (81.9%), adjusted co-efficient of determination (adjusted R^2) of 0.742 (74.2%), and standard error estimate of 0.046. The low standard error estimate of 0.046 implied a higher significance of the study variables.

Table 3: Model Summary

Model	R	R Squared	Adjusted RSquared	Std. Error of the Estimate
1	.606 ^a	.819	.742	.046

Predictors: (Constant), cost of capital, financial leverage, cashflow, and control $\alpha = 0.05$

Source: Research Findings (2016)

Correlation co-efficient (R) reveals the relationship among the study variables, revealing a strong positive relationship of 0.606 among the study variables. The R-squared, also referred to as the co-efficient of determination, explains the variation in the dependent variables that the independent variables cause. R-squared is used to measure the performance of model regression against known observations, and thereby providing a high correlation of 81.9% between the determinants of capital structure (cost of capital, financial leverage, cash flow, and control) and financial performance (ROA).

Adjusted R^2 shows how well the terms fit in a line or curve, however, it adjusts the number of terms within

the model. The adjusted r-squared decreases when the researcher adds more useless or more terms to the model. Whereas r-squared assumes that every single variable used in the study provides an explanation to the variation in the dependent variable (ROA), the adjusted r-squared presents the percentage of variation explained by only the independent variables which actually influence the dependent variable. The study results presented in table 3: indicate the adjusted R-squared value as 0.742, implying a 74.2% financial performance of commercial banks listed at NSE have a positive relationship with cost of capital, financial leverage, cash flow, and control at 95% confidence interval.

Table 4: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.002	3	.003	.0282	.002 ^b
	Residual	.147	38	.005		
	Total	.149	41			

a. Dependent Variable: ROA

b. Predictors: (Constant), cost of capital, financial leverage, cash flow, and control

The researcher used the probability value (p-value) of a statistical hypothesis test to analyse the test statistic value. The p-value greater than 0.05 implies accepting the null hypothesis H₀ as true while rejecting the alternative hypothesis H₁ as false. The low F-value of 0.028 shows that there is a low variability between the variables used in this study. It is also low enough to reject the null hypothesis (that there is no correlation between determinants of

capital structure and financial performance) using a significance level of 0.05. The findings of this study presented by the ANOVA table 4: also shows that there is a positive relationship between capital structure and financial performance of commercial banks listed at the NSE because the significance (p-value) of 0.02 that is less than 0.05. The alternative hypothesis is therefore accepted because the p-value is less than 0.05.

Regression Coefficients

Table 5: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.(p-value)	Interpretation
	B	Std. Error				
(Constant)	0.04	.017		.0187	.044	
X1	1.524	.026	.048	.0203	.028	Significant
X2	1.208	.002	.113	.0305	.025	Significant
X3	1.118	.001	.024	.0144	.034	Significant
X4	1.014	.001	.018	.0182	.073	Not Significant

a. Dependent Variable: ROA Level of Significance (α) = 0.05

Source: Research Data (2016)

The study findings, with a constant of 0.004, showed that if a unit measure of cost of capital, financial leverage, cash flow, and control, then financial performance of commercial banks listed at NSE can be presented as 0.004. X₁= 1.524 shows a unit change in cost of capital leading to 1.524 units increase in financial performance. X₂= 1.208 shows a unit change in financial leverage leading to 1.208 increase in financial performance. X₃= 1.118 shows a unit change in cash flow leading to 1.118 increase in financial performance; and X₄= 1.014 shows a unit change in control leading to 1.014 increase in financial performance. The independent variable of control factor is not significant to this study because it has a p-value (0.073) greater than 0.05.

The t-value was used in this study to measure the size of the difference relative to the variation in the research sample data. T-value was the calculated difference represented in units of standard error. T-values presented in table 5: for cost of capital (0.0203), financial leverage (0.0305), cash flow (0.0144), and control (0.0182). The T-values are closer to zero (0), and thus providing strong evidence against the null hypothesis that there is no significant difference among the study variables. The t-values are low enough, in fact lower than the significance value (p-value) of 0.05 to support the rejection of the null hypothesis. Cost of capital has a p-value of 0.028 which is lower than the significance (p-value) of 0.05, likewise to financial leverage of 0.025, and cash flow of

0.034. However, control has a p-value of 0.073 that is higher than the p-value of 0.05, and therefore providing a strong evidence that it is not significant to this study.

Summary of Key Findings and Discussions

The study adopted a multivariate model to establish the relationship between cost of capital, financial leverage, cash flow, and control and the financial performance of commercial banks listed at the Nairobi Stock exchange. The results obtained by this study showed that these determinants of capital structure positively influence the financial performance of these banks. Similar findings were obtained by descriptive statistical analysis of the variables used in this study. The summary of the descriptive statistics of the study variables. Cost of capital has the highest mean of 0.132, followed by financial leverage 0.129, cash flow 0.105, and finally control 0.086. The mean for the dependent variable ROA stands at 0.12, that is, the average return on assets for the 11 banks in a time period of five years (2011-2015). The corresponding standard deviation was significantly low for cost of capital (1.47) and financial leverage (1.36), thus a clear indication that their data were concentrated close to the mean. Cash flow and control had higher standard deviation of 0.154 and 0.158, and thereby indicating that the data was far spread apart from the mean.

The study findings revealed a low F-value of 0.028 shows that there is a low variability between the variables used in this study. It is also low enough to reject the null hypothesis (that there is no correlation between determinants of capital structure and financial performance) using a significance level of 0.05. The analysis of variance presented by ANOVA ascertained that a positive relationship exists between capital structure and financial performance of the commercial banks listed at the Nairobi Securities Exchange, since the calculated p-value of 0.002 is less than 0.005.

The regression co-efficient shows a constant value of

0.004, showing that a positive a unit measure of cost of capital, financial leverage, cash flow, and control, implies that the financial performance of commercial banks listed at the Nairobi Securities Exchange is 0.004. $X_1 = 1.524$ shows a unit change in cost of capital leading to 1.524 units increase in financial performance. $X_2 = 1.208$ shows a unit change in financial leverage leading to 1.208 increase in financial performance. $X_3 = 1.118$ shows a unit change in cash flow leading to 1.118 increase in financial performance. $X_4 = 1.014$ shows a unit change in control leading to 1.014 increase in financial performance.

The results reveal that cost of capital is a leading determinant since it has the highest Beta coefficient of 1.524, this is followed by financial leverage ($\beta = 1.208$), cash flow ($\beta = 1.118$), and control ($\beta = 0.014$). The independent variable of control factor is not significant to this study because it has a calculated p-value of 0.073, which is greater than 0.05. The currently study findings confirm the empirical literature review of a study by Mwangi (2010), which established that a strong positive relationship exists between leverage and cash flow, return on equity, liquidity, and return on investment. However, the study findings do not support that empirical literature of the study by Cooper and Schindler (2014) that negative effect exists between capital structure and financial performance. The results also confirm the pecking order theory that the marginal benefit of further increases in debt declines as debt increases, while the marginal cost increases, so that a firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing (Frank and Goyal, 2011). T-value was the calculated difference represented in units of standard error. T-values presented for cost of capital (0.0203), financial leverage (0.0305), cash flow (0.0144), and control (0.0182). The T-values are closer to zero (0), and thus providing a strong evidence against the null hypothesis that there is no significant difference

among the study variables. The t-values are low enough, in fact lower than the significance value (p-value) of 0.05 to support the rejection of the null hypothesis. Cost of capital has a p-value of 0.028 which is lower than the significance (p-value) of 0.05, likewise to financial leverage of 0.025, and cash flow of 0.034. However, control has a value of 0.073 that is higher than the p-value of 0.05, and therefore providing a strong evidence that it is not significant to this study.

SUMMARY

The study sought to establish the capital structure on financial performance of companies listed at the Nairobi Securities Exchange, using the eleven listed commercial banks as a case study. The study made use of various statistical tools of analysis to analyse the effect of capital structure on financial performance. It also adopted constructs from the existing literatures, which guided the study. Secondary data were generated from a five year (2011-2015) audited and published financial records and annual reports. Descriptive statistics as well as multiple measures have been generated from statistical packages for social scientists (SPSS version 20).

Data sources were gathered from the Central Bank of Kenya financial data and audited reports and published annual reports the eleven commercial banks listed at the NSE. Data were gathered to analyse the study variables: cost of capital, financial leverage, cash flow and control, Return on Assets (ROA). Descriptive statistics and multiple regression analysis tools provided a summary and fundamental basis of quantitative data.

The study established a positive relationship between capital structure and financial performance. Cost of capital was a key determinant of capital structure, which highly influenced financial performance. The other three independent variables: financial leverage, cash flow, and control also showed significant effect on

the financial performance of these commercial banks listed at the Nairobi Securities Exchange (NSE), Kenya. This study supports a study by Mwangi (2010), which established that a strong positive relationship exists between leverage and cash flow, return on equity, liquidity, and return on investment. However, the study findings disagree with the empirical literature of the study by Cooper and Schindler (2014) that negative effect exists between capital structure and financial performance. However, the independent variable of control factor was not significant to this study because its p-value (0.073) was greater than 0.05, and thereby giving room for further research.

CONCLUSIONS

The conclusion of this study was drawn, bearing in mind the aim to establish whether or not capital structure influence financial performance of commercial banks listed at the Nairobi Securities Exchange. This aim was achieved by adopting a descriptive statistical analysis and a multivariate model for computing financial performance (ROA), putting into account the independent variables: cost of capital, financial leverage, cash flow, and control. The effects of these independent variables on the dependent variables were analyzed by the statistical tools of analysis cited above. These study findings of this study, ascertained by statistical significance, ascertained that increasing unit levels of cost of capital, financial leverage, cash flow, and control have positive effect on the financial performance of firms listed at the Nairobi Securities Exchange, Nairobi.

RECOMMENDATIONS

This section provides a discussion of the recommendations for practice and policy. It outlines the implication on policy, theory, and practice. This study, therefore, recommends that commercial banks listed at the Nairobi Securities Exchange need to review their capital structures so that they can realise better financial performance. This study provides a basis for enhancing a strong capital

structure. The findings of this study may guide the building of strong capital structure, specifically on cost of capital, financial leverage, cash flow, and control.

In lieu of these determinants of capital structure, this study offers a basis to improving financial performance. The current study has fulfilled the gap on the existence of a small number of studies done to investigate the capital structure and financial performance in commercial banks in Kenya. This significant knowledge gap has been fulfilled by availing this document to refer and obtain secondary data for comparison purposes. The research has fully provided explanations of the effects of the determinants of capital structure (cost of capital, financial leverage, cash flow, and control) and their relationship with the financial performance of commercial banks in Kenya.

The findings of this study may act as a guide for commercial banks to enhance their capital structure for better financial performance. The banks can use

this knowledge to understand what constitutes a sound capital structure to improve their financial performance. In addition, they may be in a better position to find new ways of strengthening their weak financial structures.

Areas for Further Research

The limitation on adopting only the eleven commercial banks listed at the NSE should be addressed by conducting further research on other commercial banks not listed in the Nairobi Securities Exchange. This approach may help in gathering different opinions concerning whether capital structure influences financial performance of commercial banks. A further study should extend beyond the banking industry to understand whether capital structure influences financial performance of other industries. Further studies should also be carried out to determine whether control, as a factor of capital structure, influences financial performance of commercial banks listed at the Nairobi Securities Exchange.

REFERENCES

- Athanasoglou, P.P., Delis, M.D & Staikouras, C.K (2019), "Determinants of Bank Profitability in the South Eastern European Region Bank of Greece Working" Paper.Vol.47,pp.1- 37
- Bagozzi R. P., Davis F.D. & Warshaw P. R. (2018), "user acceptance of computer technology; acomparison of two theoretical models" *management science* Vol. 3
- Cinca, C.S., Molinero. C.M. & Garcia, F. C (2019)," Behind DEA Efficiency inFinancial Institutions". ' *Working paper, University of Zaragoza, Mimeo.*
- Cull, R. & Xu. L.C (2018) "Institutions, ownership, and finance: The Determinants of Profit Reinvestment among Chinese Firms". *Journal of Finance Economics*, Vol.77, No1, pp117-146.
- Dinx I. (2019) "politicians and banks; political influence on government-owned banks inemerging markets." *journal of financial economics: 77453* Vol.479 pp 2
- Kwan,S.H & Eisenbeis R.A (2019),"An Analysis of inefficiencies in Banking: A stochastic costfrontier approach". *Economic Riview*, No.2, pp 16-26. Federal Reserve Bank of San Francisco.