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Effect of Financial Structure on Financial Performance of Listed Commercial Banks in Kenya

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Abstract

The purpose of the study was to determine the effect of financial structure on financial performance of listed commercial banks in Kenya. Specifically, the study sought to: establish the effect of retained earnings on financial performance of listed commercial banks in Kenya, determine the effect of short term debt on financial performance of listed commercial banks in Kenya, establish the effect of long term debt on financial performance of listed commercial banks in Kenya and assess the effect of share capital on financial performance of listed commercial banks in Kenya. Panel research design was adopted and targeted all the eleven (11) listed commercial banks in Kenya for a period between 2015 and 2019. Census approach was adopted in researching all the 11 listed commercial banks in Kenya. With the aid of STATA software, data was analyzed using descriptive statistics and panel regression analysis. The findings revealed that retained earnings positively and significantly affected financial performance of commercial banks, there was a positive but insignificant relationship between short term debt and financial performance; the study also found that long term debt positively and significantly influenced financial performance of listed commercial banks in Kenya. Finally, the study established that there was a positive and significant relationship between share capital and financial performance of listed commercial banks in Kenya. The study concluded that financial performance of listed commercial banks in Kenya had been erratic between the year 2015 and 2019 in which some banks had been registering rising return on assets as others register declining financial performance in terms of return on assets. It was thus recommended to the management of listed commercial banks in Kenya that they should strive to make sound and well informed decisions when it comes to the financial structure they settle for in financing operations in their banks.

Keywords: *Financial, Structure, Performance, Retained earnings, short term debt, Long term debt, Share capital.*

1.1 Introduction

A good financial performance of commercial banks contributes to a sound and rewarding financial market in addition to a more powerful monetary system which is much better able to withstand negative shocks (Odhiambo, 2015). Poor efficiency can lead to financial institution runs, bank situations and result in a major financial dilemma. Baba and Ashogbon (2019) believe that, the monetary efficiency of listed business financial institutions can be checked via analysis of the different indications like complete possessions, total shareholder equity by comparing to earnings of the financial institutions. The success shows the economic performance of a financial institution (Hallunovi & Berdo, 2018).

Financial structure remains a highly controversial topic among researchers of corporate finance. The controversy emanates from varying views, perception and theories on how optimum financial structure can be achieved so as to minimize a firm's cost of capital and maximize firm value (Mutua, 2016). Commercial banks have found themselves in cross road trying to achieve optimal mode of financial structure financing. The selection of the mode of financing is vital and is critical to the operational sustainability of commercial banks (Kipesha & Moshi, 2014). However, studies have shown that in most scenarios, commercial banks fail to select the most appropriate form for capital financing a situation that disrupts their operations impacting their financial performance (Sathyamoorthi, Mapharing, Mphoeng & Dzimiri, 2020; Khan, Siddique & Sarwar, 2020).

The European banking sector has actually been through a major change over the last 20 years, merging waves (Lazarides, Drimpetas & Kyriazopoulos, 2015), sovereign financial obligation dilemmas (Lazarides et al., 2015), restructuring and also approach changes, legal-auditing-accounting reforms, are several of the adjustments that happened. The European Union has actually applied, encouraged and also advertised several efforts that impacted the economic performance of banking sector in the region (Pereira, 2018). In Ghana, debt financing among commercial banks stands at 84% of total capital out in which short term debt is 77% notwithstanding the increased minimum equity capital among the banks (Musah, 2017). According to Musah (2017), long term debt and short term debt ratios impact negatively the profitability of commercial banks in Ghana. In Nigeria, the over reliance on debt finance by commercial banks exerts adverse impacts on their return on asset (Nwude & Anyalechi, 2018).

In Kenya, commercial banks' financial performance has been erratic with some banks registering rising profitability as others register declining profitability. In some instances, many commercial banks in Kenya have been closed. In Kenya, the collapse of Imperial bank limited and Dubai Bank in 2015 and Chase bank in 2016 was attributed to weak financial structure (Nyabaga & Matanda, 2020). This raises concerns as to what transpired in the years 2015 and 2016 when the banking sector experienced 5% and 10% profitability dips respectively which it is yet to fully recover (Ndungu, 2019

Retained earnings defines a portion of net earnings from a firm that are not paid to shareholders as dividend but retained by the firm to be injected back to the business or used to settle firm debts. In the financial statement, retained earnings are recorded as shareholders' equity. Capital reserves and revenue reserves are examples of retained earnings (Bandyopadhyay & Barua, 2016). Revenue reserves are type of earnings by a firm used to compensate or cover up a fall or decline in profit revenue so as to sustain the firm as plough back. Revenue reserves are affordable forms of financing a company and also used in raising credit rating of when seeking credit financing.

Short-term financial obligations describe things that will certainly be utilized, transformed to fluid money, mature and paid rapidly within a year. Temporary properties are typically funded by short-term liabilities (Kipesha, et al., 2014) and are determined as a proportion of short-term

obligations to total possessions. Long term financial obligation entails rigorous lawful arrangements in between the business and suppliers of the debt which is generally gotten in touch with high firm and prices connected with economic distress (Birru, 2016). Long-term monetary responsibility is gauged as long-lasting obligations split by complete possessions.

There has been fluctuation in performance of commercial banks in Kenya with some banks registering rising profitability as others register declining profitability. This raises concerns as to what transpired in the years 2015 and 2016 when the banking sector experienced 5% and 10% profitability dips respectively (Ndungu, 2019). The decrease in earnings of Kenyan commercial banks was also observed in the years 2013, 2014 and 2015 where ROE was 20.94%, 20.88% and 17.38 specifically (Cytonn Financial investment record, 2017). Likewise, in the year 2018, major tier 1 banks witnessed sharp decline in their profits with combine ROE of 17.03% (Ndungu, 2019). This decline in profits forced some commercial banks out of the market.

2.0 Literature Review

2.1 Theoretical Review

The Modigliani-Miller (1958) theory on the irrelevancy of resources framework implicitly presumes that the marketplace possesses complete information concerning the tasks of firms and that the details asymmetry influences monetary advancement (Miller, 1988). The MM financial framework irrelevance concept assumes that the funding mix is inapplicable to the worth of the company (Villamil, 2008). The idea makes an assumption that both the investors and the private firms have the identical info worrying the marketplace issues. Form of financial structure is very important because any violation of the assumptions identified above renders commercial banks unable to run efficiently. It guides the appropriate selection of forms of financing banks operations.

Pecking Order Theory by Donaldson (1961) anticipates that due to the info asymmetry between the company and external investors concerning the real value of both present procedures as well as future earnings streams and also prospects, outside capital will certainly constantly be fairly costly compared to internal funding (Frank & Goyal, 2003). The pecking order theory suggests that companies follow a particular hierarchical style in funding their operations. They initially utilize inside produced funds in the form of preserved profits, adhered to by financial obligation, and ultimately outside funding. The ones that are not very successful are expected to use more debt and hence pay more in interest costs.

Myers (1984) argues that the benefits arising from tax shield is counterbalanced by agency costs and firm's cost arising from financial distress. To achieve balanced leverage, the benefits from interest payment have to balance with expenses that arise when issuing debt (Hackbarth, et al., 2007). The equilibrium between tax savings resulting from debts, fall in agent cost and financial difficulties has a significant effect of financial growth (Myers, 2001). Tradeoff theory is very reliant in informing banks when to finance its operation partly through debt and through equity. Marginal benefits declines with more us of debt, and in that regard a bank must balance the use of debt and equity in financing its operations.

2.2 Empirical Review

A study by Javed and Shah (2015) used Pearson correlation matrix at firm's level for correlations between different components of earnings. This paper points out that elements of retained earnings significantly and positively affects net future earnings of the firms. However, the study focused on firms and stock returns in Pakistan contrasting this study that focuses specifically on commercial banks presenting contextual gap.

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Wu, et al. (2016) conducted a study on how earnings management impact ASEAN banks' performance. The time scope of the study was 2007-2014 and study population was the ASEAN commercial banks. Bank performance was measured using profitability and managerial ratios. The study found a negative and significant relationship between earnings management practices and ASEAN banks' performance. Financing commercial banks may differ from region to region based on modes of financing hence the need to undertake the study in the context of Kenyan commercial banks. Pastory, et al. investigated (2013) studied how financial structure impacts performance of commercial banks measured using ROA. It was established that short term debt negatively impacts bank performance measured using return on assets.

Birru (2016) identified exactly how resources structure impacts the business bank monetary performance in Ethiopia. The research found that long-term financial obligation is positively yet insignificantly related to the monetary efficiency of commercial banks in Ethiopia gauged utilizing both ROA and ROE. Magero (2014), while focusing on commercial banks in Kenya investigated how financial structure choice affects financial performance. The study revealed that amongst the determinants of financial structure, capital reserve and long-term debts had a strong positive relationship with ROA and ROE.

Dudycz (2019) studied the effect of share capital on company performance. The research focused at initial public offering (IPO) companies debuting on the Warsaw Stock Exchange covering the years 1998–2013. It reveals that a large percentage of share capital in equity reduces capital flexibility but can also be a signal to improve companies' market performance. Omai et al. (2018) examined just how share funding money impacts the earnings of oil marketing companies in Kenya and found that share capital had insignificant relationship with productivity.

3.0 Research Methodology

Research Design

This research study adopted a causal research study design which is finest matched due to the fact that panel data was utilized. The design ideal suited this research study as it aided in the decision of the organization in between resources framework and also economic efficiency of provided commercial financial institutions in Kenya.

Target Population and Sampling Design

This study targeted all the eleven (11) listed commercial banks in Kenya for a period of five (5) years covering between 2015 and 2019. The study conducted a census of all the eleven (11) listed commercial banks in Kenya. The researcher used a document review guide to extract and compile the required secondary data for analysis from the financial statements. The secondary data encompassed panel information.

Collection Instrument and Type of Date Collected

The researcher used a document review guide to extract and compile the required secondary data for analysis from the financial statements. The secondary data encompassed panel data. A combination of time series with cross-sections enhances the quality and quantity of data to levels that would otherwise be impossible to achieve with only one of the two dimensions (Gujarati & Porter, 2003). The cross sectional data consisted of the firms while the time series data was the years between 2015 and 2019, because the data for the periods was current data and easily available. The data for all the variables in the study was extracted from the annual published financial reports of the commercial banks listed in NSE covering the years 2015-2019. The specific financial statements from which the data was extracted from included the

income statement, statement of financial position and the notes to the accounts. Consequently, the sample data begun in 2015 and ended in 2019.

Data Analysis

With the aid of STATA software, data was analyzed using descriptive statistics, correlation analysis and panel regression analysis. Panel data have observations of multiple phenomenon acquired over numerous amount of time for the same companies or people (Hsiao, 2007). The data was preferred due to the fact that it discloses adjustments at the specific commercial bank level, establishes time order of variables and also demonstrated how connections arise (Frees, 2004). The results were presented on tables, bars and charts. The following was the panel data model used:

$$\mathbf{Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e}$$

Where;

Y_{it} = Financial Performance

X_{1it} = Retained Earnings

X_{2it} = Short Term Capital

X_{3it} = Long Term Debt

X_{4it} = Share Capital

Ethical Consideration

A research permit was sought from the NACOSTI to allow use of secondary data from the Central Bank of Kenya website. The study ensured data collected was treated with the confidentiality it deserved i.e. it was used for academic research only and nothing else.

4.0 Results and Discussion

Descriptive Statistics

Results in Table 1 shows the descriptive statistics results of all the study variables.

Table 1: Descriptive Statistics

Variable	Minimum	Maximum	Mean	Std. Deviation
ROA	-.0094441	.0609744	.0312302	.0137582
Retained Earnings	.000661	.4237247	.1884999	.0894042
Short Term Debt	.0456321	.1402249	.0731191	.0175067
Long Term Debt	.1616541	.2707416	.2327274	.0233682
Share Capital	.0235622	.0923234	.064715	.0150529

As depicted by results on Table 1, the minimum return on assets recorded by the banks between 2015 and 2019 was -0.0094441, while the maximum ROA was 0.0609744.The results show that the banks recorded a mean ROA of 0.0312302 with a standard deviation of 0.0137582 between the year 2015 and 2019. The positive average ROA indicates that the banks were generally financially stable within that period. The results also show that the minimum retained earnings for the banks was 0.000661with a maximum of 0.4237247. The average retained earnings for the banks was 0.1884999 with standard deviation of 0.0894042. This implies that

within the period 2015 and 2019 the banks at least retaining part of their profits to inject in bank operations as opposed to distributing them among shareholders in the form of dividends.

The results further show that the minimum short term debt for the banks was 0.0456321and a maximum of 0.1402249. The mean of short term debt was 0.0731191and standard deviation of 0.0175067. Additionally, the results show that the minimum long term debt for the banks between 2015 and 2019 was 0.1616541 and a maximum of 0.2707416. The mean long term debt was 0.2327274 and standard deviation of 0.0233682. Finally, the results show that the minimum share capital was .0235622 and maximum of 0.0923234. The mean capital share was 0.064715with a standard deviation of 0.0150529.

Correlation Analysis

Table 2 depicts correlation analysis results.

Table 2: Correlation Matrix

	ROA	Retained Earnings	Short Term Debt	Long Term Debt	Share Capital
ROA	1.0000				
Retained Earnings	0.5795*	1.0000			
Short Term Debts	0.3257*	0.5824*	1.0000		
Long Term Debts	0.2875*	0.4478*	0.2927*	1.000	
Share Capital	0.3111*	0.6070*	0.6767*	0.4390*	1.000

The results in Table 2 depicts positive and significant association in between retained incomes and financial performance of listed industrial financial institutions in Kenya (0.5795 *), the outcomes revealed a positive and also significant association in between short-term finances and also monetary performance (0.3257 *). Additionally, the outcomes show that long-term debt was favorably and also significantly connected with financial efficiency of the commercial financial institutions in Kenya in between 2015 and 2019 (0.2875 *). Finally, the connection results program that there declared and significant organization in between share funding and also financial efficiency (0.3111 *). The correlation analysis outcomes are consistent with the finding of a research study by Muthui et al. (2017) who located that retained revenues had positive and significant impact on the monetary efficiency of commercial banks in Kenya The results are also in agreement with the final thought made by Muchugia, (2013) which suggested that short-term funding had a favorable and also substantial connection with the success of industrial banks in Kenya. Additionally, the results concurs with the findings of Magero (2014) which found that while amongst the determinants of financial structure, long-term debts had a strong positive relationship with ROA and ROE.

Relationship between Financial Structure on Financial Performance

Table 3 shows the results for the Relationship between Financial Structure on Financial Performance.

Table 3: Relationship between Financial Structure on Financial Performance

	Random effects
Variable	**ROA**
Retained Earnings	.0918411***
	(0.000)
Short Term Debt	.0188585
	(0.884)
Long Term Debt	.0312206***
	(0.012)
Share Capital	.082908***
	(0.008)
	.0106387
_cons	(0.534)
	25.84***
Wald statistics	(0.000)
	4.49
Hausman test	(0.0344)
R Squared	0.3594

$\mathbf{Y_{it}}$=0.0106387+0.0918411+0.0188585X_{2it}+0.0312206X_{3it}+0.082908X_{4it}

Where:

Y_{it} = Dependent variable (Financial Performance) of bank *i* at time t

$X_{1\,\mathbf{it}}$ = Retained Earnings of bank *i* at time t

$X_{2\,\mathbf{it}}$ = Short Term Debt of bank *i* at time t

$X_{3\,\mathbf{it}}$ = Long Term Debt of bank *i* at time t

$X_{4\,\mathbf{it}}$ = Share Capital of bank *i* at time t

The panel regression causes Table 3 show that the coefficient of determination R Square was 0.3594 showing that retained earnings, short term debts, long term debts as well as share resources collectively explains 35.94 percent of the variation in financial performance of listed commercial banks in Kenya as measured utilizing by return on properties. This suggests that, 35.94 percent of the variation in return on assets is influenced by that maintained revenues, short-term financial obligations, long-term financial obligations and share funding. The remaining 64.06 percent of the variant in the financial efficiency of noted business financial institutions in Kenya is influenced by various other variables which were not part of the current research.

The results show that retained earnings had significant effect on financial performance of commercial banks which was also positive (β =.0918411, p=0.000<.05), the findings also revealed a positive effect which was however insignificant between short term debt and financial performance (β =.0188585, p=0.884>.05). The results further show that long term debt positively and significantly influenced performance (β =.0312206, p=0.012<.05). Finally, the results depicts positive relationship which was also significant between share capital and performance (β =.082908, p=0.008<.05).

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These panel regression results are contrary to the findings of a research by Wu et al. (2016) which located an adverse and substantial partnership in between maintained earnings and financial performance of commercial banks The research study suggested that funding commercial financial institutions might differ from area to region based on settings of financing therefore the requirement to undertake the research in the context of Kenyan business financial institutions.. The results are also contrary with the conclusions made by Pastory et al. (2013) that short term debt negatively impacts bank performance measured using return on assets. The results also disagrees with the assertion by Mutua (2016) that Long-term debt is insignificantly related to the profitability of commercial banks. Finally the results concurs with the findings of a study by Aymen (2013) in Tunisia which found that share capital positively and significantly affected financial performance of banks in Tunisia measured using ROE, ROA and net interest.

Hypotheses Testing

H_{01}: *Retained earnings have no significant effect on financial performance of listed commercial banks in Kenya.*

The hypothesis was tested by utilizing panel regression and determined making use of p-value. The acceptance/rejection requirement was that, if the p value is less than 0.05, we decline the H01 but if it is greater than 0.05, the Ho1 is not turned down. The results in Table 12 indicate that preserved incomes had a statistically considerable impact on monetary efficiency ($p< 0.05$). The null hypothesis was as a result rejected. The research thus took on the alternate hypothesis that retained earnings have significant impact on financial performance of listed commercial financial institutions in Kenya. The hypothesis testing results are consistent with the findings of a study by Muthui, et al. (2017) which found that retained earnings had a positive effect on the growth of interest bearing assets by the commercial banks in Kenya.

H_{02}: *Short term debt has no significant effect on financial performance of listed commercial banks in Kenya.*

The hypothesis was examined by using panel regression anddetermined using p-value. The acceptance/rejection criterion was that, if the p worth is less than 0.05, we turn down the H02 however if it is more than 0.05, the H02 is not denied. The cause Table 12 show that short-term debt had significant impact on financial performance ($p > 0.05$). The null hypothesis was consequently not rejected. The study for this reason took on the null hypothesis that short-term financial debt no significant effect on financial performance of listed commercial banks in Kenya. The results are contrary to those of Musah (2017) which found that banks in Ghana are highly leveraged with debt financing constituting 84% of total capital out of which 77% is short term debt despite the increase in minimum equity capital of these banks.

H_{03}: *Long term debt has no significant effect financial performance of listed commercial banks in Kenya.*

The hypothesis was evaluated by using panel regression and figured out using p-value. The acceptance/rejection requirement was that, if the p worth is less than 0.05, we decline the H_{03} yet if it is greater than 0.05, the H_{03} is not rejected. The results in Table 12 show that long term financial debt had considerable influence on financial performance ($p< 0.05$). The null hypothesis was consequently rejected. The research hence took on the alternative hypothesis that long-term debt has significant effect financial performance of listed commercial banks in Kenya. The results were in disagreement with the findings of a study by Adeniyi, Marsidi and Babatunji (2020) that there was a negative significant relationship between long term debt and profitability of commercial banks in Nigeria. However, the results were in agreement with the

findings of Birru (2016) which indicated that long term debt had a positive relationship with financial performance of commercial banks in Ethiopia measured using both ROA and ROE.

H_{04}: *Share capital has no significant effect on financial performance of listed commercial banks in Kenya.*

The hypothesis was examined by utilizing panel regression and determined making use of p-value. The acceptance/rejection requirement was that, if the p value is less than 0.05, we reject the H_{04} but if it is more than 0.05, the H_{04} is not declined. The results in Table 12 show that share funding had a statistically significant result on financial efficiency ($p< 0.05$). The null hypothesis was consequently turned down. The research study for this reason took on the alternative hypothesis that share capital significant effect on financial performance of listed commercial banks in Kenya. The finding is contrary to the findings of a study by Omai, et al. (2018) which revealed that share capital had a negative but insignificant effect on profitability at 5% level. The results were however consistent with those of Ebaid (2009) which found out that share capital and long-term debt has a significant relationship with return on assets but insignificant relationship with return on equity.

5.0 Conclusions

The general financial performance of listed commercial banks in Kenya has been erratic between the year 2015 and 2019 in which some banks had been registering rising return on assets as others register declining financial performance in terms of return on assets. The study also concludes that listed commercial banks in Kenya recorded mixed results with regards to retained earnings as sometimes the retained earnings were rising while in some years the retained earnings were declining across the five year period of between 2015 and 2019. Based on the results, the study also concludes that the listed commercial banks in Kenya recorded erratic results on in terms of their average short term debts, long term debts and share capital.

Further the study concludes that financial structure is important since it is closely related to the financial performance of listed commercial banks in Kenya. Consequently, poor decision on composition of debt and equity is likely to results into costly capital adversely impacting the operations of the bank. The study concludes that financial structure of a bank comprising of retained earnings, short term debts, long term debts and share capital selection is very vital among listed commercial banks in Kenya as it has a direct effect on a decision relating to financial performance of these commercial banks. Therefore it suffices to conclude that financial structure as a financing decision technique of listed commercial banks in Kenya is closely linked to its survival of these banks.

Additionally, the study concluded that the more profitable a bank becomes, the more likely the retained earnings will increase and the more the bank can internally finance its operations. Thus the theory of corporate financing has been fulfilled. The study concludes that it is important to state that complete analysis and the findings are revealed that; financial performance is determined by price to book value and dividend yield. Price to book value and dividend yield are positively and significantly correlated as claimed. Also significant because it supports the claim that there is a positive and significant partnership between keep revenues and economic efficiency. Even more, the research ends that long term debt and share resources favorably and dramatically impacts economic efficiency of provided commercial financial institutions in Kenya However, short term financial obligation does not have substantial result on financial performance of noted business banks in Kenya.

Recommendations

Based on the findings and conclusions above, this study recommends to the management of listed commercial banks in Kenya that they should strive to make sound and well informed decisions when it comes to the financial structure they settle for when it comes to financing their operations since financial structure has been found to influence financial performance of banks. In particular, banks should focus on retaining part of their profits and not use all of the earned profits in paying for dividends.

Policy makers and regulators should enhance and implement policies that help listed commercial banks maintain the right level of retained earnings, short term debts, long term debts and share capital to ensure that performance of commercial banks is not adversely affected by either overcapitalization or undercapitalization and too high or too low liquidity levels.

REFERENCES

Adeniyi, A. J., Marsidi, A., Babatunji, A. S. (2020). Financial structure and Commercial Banks Performance in Nigeria, *International Journal of Academic Research in Accounting, Finance and Management Sciences* 10 (1): 239-249.

Ali, M. H., & Chowdhury, T. (2014). The Impact of Financial structure on Profitability: A Study on Some Selected Private Commercial Banks in Bangladesh. *International Journal of Business and Technopreneurship* Volume 4, No. 2, 1-20.

Aymen, B. M. M. (2013). Impact of capital on financial performance of banks: The case of Tunisia. *Banks & bank systems*, (8, Iss. 4), 47-54.

Baba, S., & Ashogbon, S. O. Pro-Activeness and the Performance of Small and Medium Enterprises (SMEs) in Nigeria.

Bandyopadhyay, A., & Barua, N. M. (2016). Factors determining financial structure and corporate performance in India: Studying the business cycle effects. *The Quarterly Review of Economics and Finance*, *61*, 160-172.

Birru, M. W. (2016). The impact of financial structure on financial performance of commercial banks in Ethiopia. *Global Journal of Management and Business Research*. 16(8), 1-11.

Chang, K. P. (2015). A Reconsideration of the Modigliani-Miller Propositions. In *The ownership of the firm, corporate finance, and derivatives* (pp. 17-22). Springer, Singapore.

Cytonn Investment report (2017). Kenya Listed Commercial Banks Analysis Cytonn FY'2017 Banking Sector Report. Available at https://cytonn.com/.

Ebaid, E. I. (2009). The impact of capital-structure choice on firm performance: empirical evidence from Egypt. *The Journal of Risk Finance*, *10*(5), 477-487.

Frank, M. Z., & Goyal, V. K. (2003). Testing the pecking order theory of financial structure. *Journal of financial economics*, *67*(2), 217-248.

Gujarati, D. N., & Porter, D. C. (2003). Basic econometrics (ed.). *Singapore: McGrew Hill Book Co*.

Hackbarth, D., Hennessy, C. A., & Leland, H. E. (2007). Can the trade-off theory explain debt structure?. *The Review of Financial Studies*, *20*(5), 1389-1428.

Hallunovi, A., & Berdo, M. (2018). The relationship between risk management and profitability of commercial banks in Albania. *Asian Themes in Social Sciences Research*, *1*(2), 44-49.

Hsiao, C. (2007). Panel data analysis—advantages and challenges. *Test*, *16*(1), 1-22.

Javed, F., & Shah, F. M. (2015). Impact of Retained Earnings on stock returns of food and personal care good industry listed In Karachi Stock Exchange. *International Journal of scientific and Research publications*, *5*(11), 397-407.

Khan, A. B., Zulfiqar, A. S., & Shah, S. Z. A. (2012). The impact of retained and distributed earnings on future profitability and stock returns in Pakistan. *International Research Journal of Finance and Economics*, *84*, 141-148.

Khan, M. A., Siddique, A., & Sarwar, Z. (2020). Determinants of non-performing loans in the banking sector in developing state. *Asian Journal of Accounting Research*.

Kipesha, E. F., & Moshi, J. J. (2014). Financial structure and firm performance: Evidence from commercial banks in Tanzania. *Research Journal of Finance and Accounting*, *5*(14), 168-178.

Magero, I. B. (2014). *Effect of financial structure choice on financial performance of commercial banks in Kenya* (Doctoral dissertation, University of Nairobi).

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American economic review*, *48*(3), 261-297.

Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: a correction. *The American economic review*, *53*(3), 433-443.

Muchugia, L. M. (2013). *The Effect Of Debt Financing On Firm Profitabilty Of Commercial Banks In Kenya* (Doctoral dissertation, University of Nairobi).

Musah, A. (2017). The impact of financial structure on profitability of commercial banks in Ghana. *Asian Journal of Economic Modelling*, *6*(1), 21-36.

Musah, A., Abdulai, M., & Baffour, H. (2020). The Effect of Mergers and Acquisitions on Bank Performance in Ghana. *Asian Journal of Economics and Empirical Research*, *7*(1), 36-45.

Muthui, J. N., Baimwera, B. & Mutegi, D. (2017). The effects of financial structure on growth in interest bearing assets by the commercial banks in Kenya. *International Academic Journal of Economics and Finance*, 2(3), 292-314.

Mutua, D. K. (2016). *Effect of Financial structure on Financial Performance of Commercial Banks in Kenya* (Doctoral dissertation, KCA).

Myers, S. C. (2001). Financial structure. *Journal of Economic perspectives*, *15*(2), 81-102.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have (No. w1396). *National Bureau of Economic Research*.

Nwude, E. C., & Anyalechi, K. C. (2018). Impact of financial structure on performance of commercial banks in Nigeria. *International Journal of Economics and Financial Issues*, *8*(2), 298-303.

Nyabaga, R. M. I., & Matanda, J. W. (2020). Effect of Firm Characteristics on Financial Performance of Listed Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, *10*(3), 255-262.

Odhiambo, F. O. (2015). The Effect of Real Estate Finance on the Financial Performance of Listed Commercial Banks in Kenya: A Panel Evidence. *Journal of Finance and Accounting*, *3*(4), 61-68.

Omai, M. D., Memba, F., S. & Njeru, A., G. (2018).The Effect Of Share Capital Finance On Profitability Of Petroleum Marketing Firms In Kenya, *International Journal of Economics, Commerce and Management* 6(1), 410-422.

Pastory, D., Marobhe, M., & Kaaya, I. (2013). The Relationship between Financial structure and Commercial Bank Performance: A Panel Data Analysis. *International Journal of Financial Economics* Vol. 1, No. 1, 2013, 33-41.

Sathyamoorthi, C. R., Mapharing, M., Mphoeng, M., & Dzimiri, M. (2020). Impact of Financial Risk Management Practices on Financial Performance: Evidence from Commercial Banks in Botswana. *Applied Finance and Accounting*, *6*(1), 25-39.

Villamil, A. P. (2008). The Modigliani-Miller Theorem. *The New Palgrave Dictionary of Economics, Second Edition. Eds. Steven N. Durlauf and Lawrence E. Blume. Palgrave Macmillan, 6*.

Yazdanfar, D., & Öhman, P. (2015). Debt financing and firm performance: an empirical study based on Swedish data. *The Journal of Risk Finance*, *16*(1), 102-118.