

THE EFFECT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS LISTED AT THE NAIROBI SECURITIES EXCHANGE

Okumu Benson Otieno¹, Dr. Simeyo Otieno², Dr. Edwins Baraza³

¹ Department of Accounting & Finance, School of Business and Economics, Jaramogi Oginga Odinga University of Science & Technology

^{2,3} Department of Accounting & Finance, School of Business and Economics, Jaramogi Oginga Odinga University of Science & Technology

DOI: <https://doi.org/10.5281/zenodo.10054004>

Published Date: 13-February-2023, Amendment Date: 30-October-2023

Abstract: Capital structure attributes are fundamental to the operations of a firm. This study sought to examine the effect of capital structure on the financial performance of commercial banks listed at the Nairobi Securities Exchange for the period 2015 to 2019. A general objective of this study was to determine the effect of capital structure on the financial performance of commercial banks listed at the Nairobi securities exchange. The study was guided by three theories; Agency theory on which the study is founded, Trade-off theory, and Pecking order theory as supporting theories. The study adopted a correlational design on all the 12 listed commercial banks at the NSE. The study used secondary data from audited financial statements. The quantitative data was analyzed through pooled multiple regression. Findings indicate that there is a negative statistically significant effect of Debt financing on financial performance of listed commercial banks in Kenya with a positive statistically significant effect of Retained earnings on financial performance of listed commercial banks in Kenya. In addition, there is a positive statistically significant effect of Equity financing on financial performance of listed commercial banks in Kenya. Similarly, there is a positive statistically significant mediating effect of capital adequacy on the relationship between capital structure and financial performance of listed commercial banks in Kenya. The study contributes to academic literature by exploring the role of debt capital in corporate governance in an emerging economy such as Kenya. In conclusion, the reveals the correlation of capital structure and performance of listed commercial banks. The growth of Saccos is phenomenal and capturing their capital structure attributes and financial performance would be a worthy research in future studies.

Keywords: Agency theory, Capital structure, Debt Financing, Equity Financing, Financial Performance, Pecking Order.

1. INTRODUCTION

The term "capital structure" refers to the method of financing a corporation, which is typically a combination of loans and equity capital. Both the managers of the firms and the fund suppliers must decide how to finance a company. When debt and equity are used improperly to finance a business, the performance and even long-term viability of the company suffer. Therefore, managers must carefully analyze the capital structure decision, which is a challenging undertaking because the usage of leverage differs from one organization to another, in order to maximize the firm value. Therefore, managers typically strive to create their capital structure with the optimal ratio of debt to equity (Graham & Leary, 2011).

Capital structure theories were influenced by Modigliani and Miller (1958). Modigliani and Miller (1958) thesis were that in a perfect market, a firm's value is independent of its capital structure, or else investors would gainfully sell the shares of the firm with the higher value and buy similar shares in the firm with lower value and earn a riskless return. The difficulty is that in the real-world, friction exists (market imperfections) and those frictions make the capital structure relevant (Durand, 1959). Investor behavior, which is influenced by contract law, taxes, and regulations, is a source of friction, and it is this friction that forces management to decide on the capital structure (Li, Whited & Wu, 2014). Managers who have been fired may still be sensible.

Since Modigliani and Miller (1958), empirical research has found certain widely accepted facts about capital structure choice; however, because most of this evidence is centred on businesses in developed nations, it is unclear how these facts relate to various theoretical theories (Margaritis & Psilaki, 2007; 2010). It is crucial to evaluate the durability of these findings beyond the environment in which they were discovered in order to determine whether these empirical regularities are simply false correlations or whether they support any theory or not (Rajan & Zengales, 1995).

While banking seems to be changing, so does the purpose of banks. Societies around the world now expect banks to help address income inequality, racial and gender inequity, and climate change. Banks can play a leadership role in driving the sustainable finance agenda but will need to engage with other institutions to solve the many problems in this area.

1.1 Statement of the Problem

The Kenyan commercial banks are classified into three peer groups using a weighted composite index. The index comprises net assets, customer deposits, capital and reserves, number of deposit accounts, and number of loan accounts. A bank with a weighted composite index of 5 percent and above is classified as a Tier 1 (large bank). A Tier 2 bank (medium bank) has a weighted composite index of between 1 percent and 5 percent while a Tier 3 bank (small bank) has a weighted composite index of less than 1 percent. For the year ended December 31, 2019, there were 9 Tier 1 banks with a combined market share of 74.68 percent, 9 medium banks with a combined market share of 17.10 percent, and 21 small banks with a combined market share of 8.22 percent. The capital and reserves in the banking industry rose by 7.44 percent in 2019 from Kshs 678.34 billion in December 2018 to Kshs 728.82 billion in December 2019. While the medium peer group banks and small peer group banks had decreases in capital and reserves, the large peer group banks saw increases in both. Additional capital injections by commercial banks and retained revenues from the profits made during the year are both responsible for the growth in capital and reserves. The banking sector registered improved performance in Profit before taxes rose by 4.2 percent in 2019, reaching Kshs. 159.1 billion in December from Kshs. 152.7 billion in December 2018. (CBK 2019). Businesses do not operate in perfect markets; it is therefore important to look at capital structure decisions made in these marketplaces. Furthermore, there is no justification for expecting a general understanding of the debt-equity trade-off. However, there are a number of helpful conditional theories. Researchers disagree over whether performance drives capital structure, or whether capital structure influences performance (Margaritis & Psillaki, 2007; 2010). Which of these scenarios is most prevalent among Tier 1 commercial banks listed on the Nairobi Securities Exchange was determined by this study.

1.2 Objectives of the study

The study sought to determine the effect of capital structure on the financial performance of commercial banks listed at the Nairobi securities exchange. Specific objectives include;

- i. To examine the effect of debt financing on the financial performance of listed commercial banks in Kenya.
- ii. To establish the effect of retained earnings on the financial performance of listed commercial banks in Kenya.
- iii. To determine the effect of equity financing on the financial performance of listed commercial banks in Kenya
- iv. To assess the mediating role of banking regulations on the relationship between capital structure and financial performance of listed commercial banks in Kenya

1.3 Hypotheses

H₀₁: There is no significant effect of Debt financing on the financial performance of listed commercial banks in Kenya

H₀₂: There is no significant effect of Retained earnings on the financial performance of listed commercial banks in Kenya.

H₀₃: There is no significant effect of Equity financing on the financial performance of listed commercial banks in Kenya

H₀₄: There is no significant mediating effect of banking regulations on the relationship between capital structure and financial performance of listed commercial banks in Kenya.

1.4 Significance of the study

The Central Bank of Kenya as the regulator of banking operations in Kenya benefits from this study by understanding the relationship between capital structure and financial performance of commercial banks. CBK can use the findings of this study in policy formulation and setting up fiduciary regulations on bank managers. The results of this study inform bondholders and shareholders in portfolio construction and management and the disciplinary role that debt capital plays in the daily running of corporate entities.

Academia and knowledge management in general benefit from this study in terms of testing the relevance and irrelevance of decisions in a company's capital structure specifically affect how much value debt capital adds to shareholders' value. This allows for testing of western-style theories developed for the developed world and their applicability in developing economies such as Kenya. Commercial banks benefit from this study in terms of their evaluation of capital structure decisions vis a vis other organization in terms of capital mix. Investors need a return on their capital and this study will assist the banks to attract, and retaining capital in an optimal manner.

1.5 Scope of the Study

This study covered 12 listed commercial banks at the Nairobi Securities Exchange. By using correlation design with secondary data from Central bank annual supervision reports, the study relied exclusively on secondary data for the period 2015 to 2019. This period coincided with interest rate caps and their subsequent repeal thereby testing the speed of adjustment in capital structure dynamics within the complementarity of agency theory, dynamic trade-off theory and dynamic pecking order theory. The choice of commercial banks is informed by their intermediation role between borrowers and lenders.

2. LITERATURE REVIEW

This section looked at theoretical foundations of the study as well as empirical studies taken so far. Theories on capital structure are meant to identify the capital structure mixes that maximize both the wealth of shareholders and the market value of the firm. This study reviewed key theories such as Agency theory on which the study is founded and two supporting theories; the Trade-off theory and Pecking order theory. Agency theory is paramount in this study as capital structure decisions are determined by agency costs for both debt and equity issues. The two supporting theories: trade-off and pecking order, predict how manager-agents make financing decisions in the firms.

2.1 Agency theory

When an individual's activities have an impact on both his welfare and that of another person in an express or implied contractual connection, there is an agency relationship (Jensen & Meckling, 1976). Investment decisions made by managers affect a company's development rate, risk level, and market value; as a result, the returns to owners depend on the calibre of managerial choices. The term "agency problem" is also used to describe a circumstance in which shareholders take decisions that have a negative effect on other stakeholders. The flaws of agency theory are such that it provides very little information regarding actual board functioning and behavior and hence a call for greater theoretical pluralism and a detailed attention to board processes and dynamics. The theory is thus a closed system in disregard of how organizations interact with their environment in an open system format. This theory guided the study in investigating managerial overconfidence in capital structure decisions and whether financing decisions are a product of intricate agency issues.

2.2 Trade-off theory

According to the trade-off theory, businesses pursue debt levels that strike a balance between the tax benefits of taking on more debt and the costs of potential financial difficulty. It is founded on optimal leverage in which any exogenous shock to the capital structure equilibrium is immediately corrected.

According to the theory, tax-paying businesses will only borrow modest amounts. By permitting the firm's interest expense to be deducted from gross revenue for corporate tax purposes but disallowing deductibility of payments to equity holders, Modigliani and Miller (1963) claim that the tax code promotes debt financing over equity financing (dividends are not tax-deductible on the personal account). Kraus and Litzenberger (1973) postulate the costs of financial distress may reconcile

the restrictions on the use of debt that have been seen with the conclusions of the tax-adjusted Modigliani-Miller analysis of financial policy. While the static trade-off theory suggests that optimal capital structure is determined by balancing corporate tax savings against cost of bankruptcy, the theory is limited in its ability to construct an optimal capital structure model for different business settings. This theory guides managers in discounting sources of finance for capital budgeting purposes.

2.3 Pecking-Order Theory

The pecking order idea, corporations have a certain preference order for capital (Myers and Majluf, 1984). The theory postulates that managers will finance investment projects, starting with the least (lowest cost of capital) to the most expensive (highest cost of capital) financing channels. That is, managers will first utilize internal capital (cash and cash equivalents), and then, any shortfall in financing investments (financial deficit), will be funded by debt and equity in that order. This theory suffers the limitation of recommending large equity issues of small low leverage growth firms. This theory guided the study in examining sequential managerial activism in financing decision making. The dynamic version of pecking order theory allows for a delicate interaction among firm specific characteristics and financial market conditions.

2.4 Review of Empirical Literature

2.4.1 Debt Financing and Financial Performance

In their paper entitled "Antecedents of Capital Structure and Firm Performance: Evidence from G7 Countries," Riaz, Jinghong, and Akhtar (2021) examined the relationship between debt level and firm performance for 167 manufacturing enterprises in the G7 countries between 2007 and 2018. Findings from the generalized technique of moments show a positive correlation between debt levels, as measured by total debt, long-term debt, and short-term debt, and company performance, as measured by long-term assets, net cash, profitability, taxes, and tangible assets. The measurability of the study variables was a drawback. In order to overcome this constraint, the current study used specific metrics to gauge debt levels and company performance, such as return on assets.

2.4.2 Retained Earnings and Financial Performance

In Nairobi County, Kenya, Nduati and Wepukhulu (2020) investigated the impact of retained earnings on the financial performance of saving and credit cooperative societies. Retained earnings served as the predictor variable, and return on capital employed served as a proxy for the independent variable, financial success (ROCE). Results from a study of 29 SACCOs using univariate linear regression analysis show that a unit increase in retained profits significantly increased ROCE by 0.43184 units in Kenyan SACCOs. This study's use of absolute retained earnings amounts for regression calculations was one of its limitations. The current study employs retained profits to equity ratio for regression in order to overcome this constraint.

2.4.3 Equity Financing and Financial Performance

Gathara, Kilika, & Maingi (2019) studied Effect of Equity on Financial Performance of Selected Companies Listed in the Nairobi Securities Exchange, Kenya. Using multiple regression analysis on 30 NSE listed companies between 2007 to 2015, the study utilized RoA, RoE and RoS as dependent variables while owners' equity was the independent variable. Results indicate that owners' equity has a positive and statistically significant effect on the financial performance of listed firms. This study was limited in its use of multiple measures of firm performance especially return on sales. A larger percentage of credit sales might end up being bad debts and relying on such a variable as a performance measure may not depict a fair picture of reality. To address this limitation, the current study relies on two measures of firm performance RoA and RoE.

2.4.4. Capital Adequacy

In their study, Aliyu, Abdullahi, and Bakare (2020) looked at the capital sufficiency and financial performance of Nigerian deposit money institutions with international permission. From 2012 to 2019, the study sampled 8 deposit money banks. The total assets, loans, and advances were used to calculate the predictor variable capital adequacy. RoE was used to gauge the financial success of dependent variables. Findings from multiple regression analysis show that capital sufficiency positively and statistically significantly affects deposit money banks' financial performance in Nigeria. This study's use of absolute values for total assets, loans, and advances rather than ratio analysis had some drawbacks. The current study uses ratio analysis of total capital divided by total risk-weighted assets to capture capital adequacy in order to overcome this restriction.

3. METHODOLOGY

This study adopted a positivistic correlational design capturing secondary data from the Nairobi Securities Exchange located in Nairobi for the period 2015 to 2019. The study was a census survey of 12 listed commercial banks that were selected for this study due to their wide coverage and generalizability of findings to the banking subsector thus, it employed saturated sampling technique. The study used document analysis guide as a collection instrument for print material from the Central bank of Kenya through Bank Supervision Annual reports. Content analysis was used to evaluate data obtained from banking supervision reports with Pooled Multiple regression used to analyze the secondary data.

4. FINDINGS

This section presents the analysis of findings, results interpretation, discussion and linkage with literature reviewed and theories used as was guided by the study objectives.

1) Debt financing and financial performance of listed commercial banks in Kenya

The first objective of the study was to examine the effect of debt financing on financial performance of listed commercial banks in Kenya. The null hypothesis was stated as;

H₀₁: Debt financing has no significant influence on financial performance of listed commercial banks in Kenya.

The study operationalized debt financing to be proxied by Debt equity ratio. Multiple regression analysis was therefore used to assess if debt ratio significantly predicted return on assets and return on equity of listed commercial banks in Kenya. This was the test of the first null hypothesis as shown below.

Model		Coefficients ^a		Standardized Coefficients	t	Sig.
		Unstandardized Coefficients	Std. Error			
	B			Beta		
1	(Constant)	4.692	.462		10.161	.000
	Debt Equity ratio	-.239	.077	-.378	-3.112	.003

a. Dependent Variable: Return on Assets

Debt equity ratio coefficient = - 0.239, the test statistic $t = - 3.112$, p value = 0.003 which is less than 0.05. Reject the null hypothesis. In conclusion, Debt equity ratio had a negative statistically significant effect on return on assets. For every unit increase in debt equity ratio, a 0.239-unit decrease in RoA is predicted, holding all other variables constant. This result concurs with Islam and Iqbal (2022) in their study on the relationship between capital structure and firm performance: New evidence from Pakistan. Results from the study indicate that debt has a negative influence on RoA, RoE and Return on Sales.

2) Retained earnings and Financial performance of listed commercial banks in Kenya.

The second objective of the study was to establish the effect of retained earnings on the financial performance of listed commercial banks in Kenya. The null hypothesis was stated as;

H₀₂: There is no significant effect of Retained earnings on the financial performance of listed commercial banks in Kenya.

Model		Coefficients ^a		Standardized Coefficients	t	Sig.
		Unstandardized Coefficients	Std. Error			
	B			Beta		
1	(Constant)	1.616	.317		5.096	.000
	Retained earnings to Equity ratio	.035	.005	.669	6.857	.000

a. Dependent Variable: Return on Assets

Retained earnings to equity ratio coefficient = 0.035, the test statistic $t = 6.857$, p value = 0.000 which is less than 0.05. We therefore reject the null hypothesis. In conclusion, Retained earnings to equity ratio had a positive statistically significant effect on return on assets. For every unit increase in Retained earnings to Equity ratio, a 0.035-unit increase in RoA is predicted, holding all other variables constant.

3) The effect of equity financing on the financial performance of listed commercial banks in Kenya

The third objective of the study was to determine the effect of equity financing on the financial performance of listed commercial banks in Kenya. The null hypothesis was stated as;

H₀₃: There is no significant effect of Equity financing on the financial performance of listed commercial banks in Kenya.

		Coefficients ^a			
		Unstandardized Coefficients		Standardized	
Model		B	Std. Error	Beta	t
1	(Constant)	2.692	.375		7.187
	Equity Ratio	.047	.019	.307	2.453
					Sig.
					.000
					.017

a. Dependent Variable: Return on Assets

Equity ratio coefficient = 0.047, the test statistic $t = 2.453$, p value = 0.017 which is less than 0.05. We therefore reject the null hypothesis. In conclusion, Equity ratio had a positive statistically significant effect on return on assets. For every unit (i.e., point, since this is the metric in which the tests are measured) increase in Equity ratio, a 0.047-unit increase in RoA is predicted. Equity ratio had a positive statistically significant effect on return on assets ($p < 0.005$).

4) The Mediating Role of Banking Regulations On the Relationship Between Capital Structure and Financial Performance of Listed Commercial Banks in Kenya

The fourth objective of the study was to assess the mediating role of banking regulations on the relationship between capital structure and financial performance of listed commercial banks in Kenya. The null hypothesis was stated as;

H₀₄: There is no significant mediating effect of banking regulations on the relationship between capital structure and financial performance of listed commercial banks in Kenya.

		Coefficients ^a			
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	3.427	2.525		1.357
	Capital Structure	1.095E-6	.000	.606	5.881
	Capital Adequacy	.261	.154	.174	1.694
					Sig.
					.180
					.000
					.096

a. Dependent Variable: Financial Performance

Capital adequacy coefficient = 0.261, the test statistic $t = 1.694$, p value = 0.096 which is more than 0.05. We therefore reject the null hypothesis. In conclusion, Capital adequacy had a positive statistically significant mediating effect on return on equity. Capital adequacy partially mediates the relationship between capital structure and financial performance of listed commercial banks with a p value of 0.096 which is above 0.05. This finding is comparable to Aliu, Abdullahi & Bakare (2020) which examined capital adequacy and financial performance of deposit money banks with international authorization in Nigeria. Findings indicate that capital adequacy has a positive and statistically significant relationship on financial performance of deposit money banks in Nigeria. The study however contradicts Nyanyuki, Nyang'au & Onwonga (2022) which evaluated the effects of capital adequacy on financial performance of commercial banks in Kenya for the period 2015 to 2019. Results indicated that capital adequacy had a negative but significant effect on financial performance of commercial banks in Kenya.

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

Objective one examined the effect of debt financing on the financial performance of listed commercial banks in Kenya. In line with this objective, Hypothesis one states that *there is no significant effect of debt financing on financial performance of listed commercial banks in Kenya*. Results of regression analysis show that there is a negative statistically significant ($p < 0.05$) effect of debt financing on financial performance of listed commercial banks in Kenya. In conclusion, there is a significant effect of Debt financing on financial performance of listed commercial banks in Kenya resulting in the rejection of hypothesis one in favor of the alternative hypothesis.

Objective two was to establish the effect of retained earnings on the financial performance of listed commercial banks in Kenya. In line with this objective, Hypothesis two states that *there is no significant effect of retained earnings on financial performance of listed commercial banks in Kenya*. Results of regression analysis show that there is a positive statistically significant ($p < 0.05$) effect of retained earnings on financial performance of listed commercial banks in Kenya. In conclusion, there is a significant effect of Retained earnings on financial performance of listed commercial banks in Kenya resulting in the rejection of hypothesis two in favor of the alternative hypothesis.

Objective three was to determine the effect of equity financing on the financial performance of listed commercial banks in Kenya. In line with this objective, Hypothesis three states that *there is no significant effect of equity financing on financial performance of listed commercial banks in Kenya*. Results of regression analysis indicate that, Equity ratio had a statistically significant effect on return on equity ($p < 0.05$). This result agrees with Gathara, Kilika, & Maingi (2019) which studied Effect of Equity financing on Financial Performance of Selected Companies Listed in the Nairobi Securities Exchange, Kenya.

Objective four was to assess the mediating role of banking regulations on the relationship between capital structure and financial performance of listed commercial banks in Kenya. In line with this objective, Hypothesis four states that *there is no significant mediating effect of banking regulation (capital adequacy) on the relationship between capital structure and financial performance of listed commercial banks in Kenya*. Results of regression analysis indicate that there is a partially significant mediating ($p < 0.05$) effect of banking regulation on the relationship between capital structure and financial performance of listed commercial banks in Kenya. Reject null hypothesis four.

5.2 Conclusion of the Study

This study set out to determine the effect of capital structure on the financial performance of commercial banks listed at the Nairobi securities exchange. In conclusion, the study reveals the correlation of capital structure and performance of listed commercial banks. High leverage puts pressure on commercial banks to cut down on dividend pay-out which could lead to management replacement at annual general meetings. Dissatisfied shareholders will not appreciate the monitoring role that debt plays in their organizations.

5.3 Recommendations.

For policy implications this study recommends that the Central bank of Kenya shall identify domestic systemically important banks (D-SIBs) by asset base such as Equity Group Holdings, KCB Group Holdings Plc, among others in a bid to have additional loss absorbency in terms of Capital adequacy.

5.4 Future Research Recommendations

The current study captured listed commercial banks within a 5-year period; 2015 to 2019. The growth of Saccos is phenomenal and capturing their capital structure decisions and financial performance would be a worthy research.

5.5 New Knowledge generated from the Study

The importance of equity financing has come out clearly in terms of its loss absorbing capacity and the fact that dividends are only declared on company profits. Retained earnings financing comes closer to equity capital in that the reserves are free cash flows to company management for expansion purposes. Debt financing on the other hand is crucial in a capital structure as it comes with interest payment tax shield and the monitoring role it plays on company agents (managers).

REFERENCES

- [1] Aliu, A.A., Abdullahi, N.A., & Bakare, T.O. (2020). Capital adequacy and financial performance of deposit money banks with international authorization in Nigeria. *Accounting and Taxation Review*, 4(4): 78-91.
- [2] CBK. (2019). Bank Supervision Annual Report. Nairobi
- [3] Durand, D. 1959. The Cost of Capital, Corporation Finance and the Theory of Investment: Comment. *American Economic Review*, 49(4): 639-55.
- [4] Gathara, Z, M; Kilika, J.M, & J. N, Maingi (2019): Effect of Equity on Financial Performance of Selected Companies Listed in the Nairobi Securities Exchange, Kenya. *International Journal of Business & Law Research* 7(1):1-24, Jan.-Mar., 2019
- [5] Graham, J. R. & Leary, M. T. (2011). A review of empirical capital structure research and directions for the future. *Annual Review of Financial Economics*, 3(1): 309-345.
- [6] Jensen, & Meckling, W. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360.
- [7] Kraus, A., & Litzenberger, R. H. (1973). A State - Preference Model of Optimal Financial Leverage. *Journal of Finance*, 28(4), 1973.
- [8] Li, S., Whited, T.M. & Wu, Y. 2014. Collateral, Taxes, and Leverage. Available from: http://www.vgsf.ac.at/fileadmin/user_upload/P/2014_Whited_Collateral_Taxes_and_Leverage.pdf.
- [9] Margaritis, D. & Psilaki, M. (2010). Capital structure, equity ownership and firm performance. *Journal of Banking and Finance*, 34(3):621 – 632.
- [10] Modigliani, F. & Miller M.H. (1958). The Cost of capital, corporation finance and the theory of investment. *American Economic Review*, 48(3): 261-297.
- [11] Modigliani, F. & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A Correction. *American Economic Review*, 53(3): 433-43.
- [12] Myers, S. C. & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* 13 (2): 187–221
- [13] Nduati, N. W. & Wepukhulu, J. M. (2020). Effect of retained earnings on financial performance of saving and credit co-operative societies in Nairobi County, Kenya. *International Academic Journal of Economics and Finance*, 3(6), 197-209
- [14] Nyanyuki, M. N., Nyang'au, A., Onwonga, M. (2022). Evaluation of the effects of capital adequacy on financial performance of commercial banks in Kenya. *International Academic Journal of Economics and Finance*, 3(7), 113-126
- [15] Rajan, R.G. & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, 50(5):1421-1460.
- [16] Riaz, M. Jinghong S & Akhtar, M.N (2021). Antecedents of Capital Structure and Firm Performance: Evidence from G-7 Countries. *Research Square*