**CAPITAL STRUCTURE AND FINANCIAL SECTOR PERFORMANCE IN NIGERIA: CASE OF SELECTED COMERCIAL BANKS**

**BY**

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**Abstract**

*The paper investigates the impact of capital structure on financial sector performance in Nigeria with a specific reference to commercial banks in the country from 2010 to 2019. Employing a dynamic panel data procedure, it was observed that equity ratio and debt ratio played significant roles on the performance of commercial banks in the country, but equity ratio shown a more positive effect on the selected performance indexes (returns on asset, returns on equity and returns on investment) employed in the paper. The debt ratio was seen to have negative impact on the ROA and ROI and thus a disincentive to the growth of this sub-sector; this could be as a result of accumulated debts, unpaid debts or bad debts. Other important variables affecting the performance of commercial banks as revealed from this study are; earnings per share, age of the banks and inflation rate in the country. The paper therefore recommends that banks in the country should manage their equity-debt mix optimally such that conscious strategies are adopted in their various loan policies in order to achieve sustainable performance.*

Key words: Capital structure, commercial banks, performance, equity, debt, ROA, ROE, ROI

1. **INTRODUCTION**

One major decision of any organization is to determine the best financing mix or capital structure that could ensure optimal growth of the firm. Capital structure decision is the mix of debt and equity that a firm uses to finance its business. An appropriate capital structure is not only because of it to maximize returns to various organizational domains, but also the impact such a decision have on an organizations ability to deal with its competitive environment (Chen and Chen, 2011). According to Tariq et al (2014), the firm decision about capital structure plays a significant role in maximizing organization value and performance of an organization. This decision about capital structure involves the use of a combination of various sources of funds which a firm uses to finance its operations and for capital investments. These sources comprise the use of short term debt, long term debt, preferred stock and common stock or equity financing. All the organizations do not use uniform capital structure and as such differ in their financial decisions. Since capital structure constitute the largest and most important sources of financing, especially for financial companies, financial managers should ensure that the combination of debt and equity is such that it does not create problem in terms of searching for higher return investment opportunity. This is because when the combination is wrong the cost of capital becomes high, thereby reducing corporate value (Ningi and Usman, 2017).

In the work of Modigliani and Miller (1958), under perfectly competitive capital market conditions, the firm value is free from the influence of capital structure decisions. Instead, they argued that the firm value is determined solely by its basic earning power. Later, however, they proposed, by taking the effect of tax advantage on debt that the firm value can be increased by incorporating more debt into the capital structure and thus the optimal capital structure of a firm should be made up of a hundred percent of debt. However, it is arguable whether these assumptions hold in the real world; thus, several theories, for instance, the static trade-off theory, pecking order theory, profitability theory and theory of agency cost have emerged to explain the connection of capital structure decisions with the firm performance.

The banking industry channel funds from the surplus units to the deficit units through it loan channels, thereby boosting economic activities. For the banking sector to continue to boost the economy there is need for it to improve its performance by being profitable. Bobakova, (2003) posits that the importance of bank profitability 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 as a necessity for successful banking in a period of growing competition in financial markets (Olanrewaju, 2016). Accordingly, the financial sector in Nigeria has been a major prime mover of economic activity most especially in this 21st century where virtually all human activity revolves around the use of financial institution and the need for these institutions to help attaining the target of sustainable development (SDG) agenda goals. Thus, a research on major factors that could mar or make such an important sector of an economy would not be out of place, most especially on it decision about the mix of debt and equity nexus the sector’s performance. However, there is dearth of research in this particular area as far the literature is concern in the country and more over, the available ones need to be updated.

1. **THEORETICAL FRAMEWORK**

The paper employs two major theories that connect the main objective of the study namely; the trade-off theory and profitability theory. The two applied theories are discussed in turns in this sub-section.

**2.1 The Trade-off Theory**

The term trade-off theory is used by different authors to describe a family of related theories. Management running a firm evaluates the various costs and benefits of alternative leverage plans and strives to bring a trade-off between them. Often it is assumed that an interior solution is obtained so that marginal costs and marginal benefits are balanced. Thus, trade-off theory implies that company’s capital structure decision involves a trade-off between the tax benefits of debt financing and the costs of financial distress. When firms adjust their capital structure, they tend to move toward a target debt ratio that is consistent with theories based on tradeoffs between the costs and benefits of debt.

There are two forms of this theory; static trade-off and dynamic trade-off theory. In a static trade-off framework the firm is viewed as setting a target debt to value ratio and gradually moving towards it (Myers, 1984). The theory says that every firm has an optimal debt–equity ratio that maximizes its value. The theory affirms that firms have optimal CSs, which they determine by trading off the costs against the benefits of the use of debt and equity. The benefits from debt tax shield are thus adjusted against cost of financial distress. Agency cost, informational asymmetry and transaction cost are some of the other costs to be mitigated. The theory predicts that an optimal target financial debt ratio exists, which maximizes the value of the firm. The optimal point can be attained when the marginal value of the benefits associated with debt issues exactly offsets the increase in the present value of the costs associated with issuing more debt.

For the dynamic trade-off theory, implementing the role of time is very significant in identifying the optimal capital structure. In a dynamic model, the correct financing decision typically depends on the financing margin that the firm anticipates in the next period Goldstein and Leland, 2001). Some firms expect to pay out funds in the next period, while others expect to raise funds. Again, if firms optimally finance only periodically because of transaction costs, then the debt ratios of most firms will deviate from the optimum most of the time. In the model, the firm's leverages responds less to short-run equity fluctuations and more to long-run value changes (Stiglitz, 1972).

**2.2 Profitability Theory**

The term Profitability is defined as the ability of a given investment to earn a return from its use. The predictions on profitability are ambiguous. The trade-off theory predicts that profitable firms should be more highly levered to offset corporate taxes, while in some cases profit was found to be negatively correlated with leverage. The two major theories that explain the relationships between profitability and capital structure are; the pecking order theory and the free cash flow theory.

In the case of the former, Donaldson (1961) followed by Myers (1984) suggests that management followed a preference ordering when it comes to financing. His work suggests that the costs of issuing risky debt or equity overwhelm the forces that determine optimal leverage in the trade-off model, the result is the pecking order. He also argued that the trade-off theory fails to predict the wide degree of cross-sectional and time variation of observed debt ratios. The pecking order theory is mainly a behavioural explanation of why certain companies finance the way they do. It is consistent with some rationale arguments, such as asymmetric information and signalling, as well as with flotation costs. Moreover, it is consistent with the observation that the most profitable companies within an industry tend to have the least amount of leverage.

The pecking order theory explains why the bulk of external financing comes from debt; why more profitable firms borrow less: not because their target debt ratio is low.

The order followed is as follows:-

1. Firms prefer internal finance
2. If external finance is required, firms issued the safest security first. They start with debt, then possible hybrid securities such as convertible bonds then perhaps equity as a last resort.

This Pecking Order Theory suits large firms with high profits and which has enough internal funds in the form of retained earnings and depreciation. These firms follow a stringent dividend policy and a target dividend payout ratio. Thus, this theory states that highly profitable firms prefer internal funds and when external funds are required the firm will borrow, rather than issuing equity. The pecking order theory predicts that high-growth firms, typically with large financing needs, will end up with high debt ratios because of a manager’s reluctance to issue equity.

The later theory (free cash flow), was also framed for matured firms that are prone to over invest. It says that high debt levels will increase value, despite the threat of financial distress, when a firm’s operating cash flow significantly exceeds its profitable investment opportunities Myers and Majluf (1984). Thus, the profit earning capacity increases the value of the firm despite the threat of financial distress. Firms with a positive free cash flow use this cash flow to lower their debt ratio. Firms with a negative free cash flow increase their debt ratio to respond to the lack of internal funds. The percentage adjustment is smaller for firms with relatively more debt than for firms with relatively low debt.

1. **EMPIRICAL REVIEW**

Gropp and Heider (2008) selected 200 largest listed banks from USA and Europe (100 from the US and 100 from the EU). The study observed that standard cross-sectional determinants of firm leverage also apply to the capital structure of large banks in the United States and Europe. Like non-financial firms, banks according to the study appear to have stable capital structures at levels that are specific to each individual bank. The outcome suggest that capital requirements may only be of second-order importance for banks’ capital structures and confirm the robustness of current corporate finance findings in a holdout sample of banks.

In the work of Ju, Parrino, Poteshman and Weisbach (2003), they provided a simulated tax bankruptcy tradeoff model in an attempt to quantify the Miller (1977) claim that bankruptcy costs are too small. In their analysis the tradeoff model performs better than is commonly recognized. Ali, Akhtar and Sadaqat (2011) investigate the impact of capital structure on Pakistan commercial banks. Their regression estimates show that there is significant relationship between leverage, bank’s size, profitability, tangibility and liquidity. They further opined that non-tax shield is found to have positive but insignificant connection with the leverage of the banking sector in Pakistan.

Buferna, Bangassa and Hodgkinson (2005), investigate the determinants of capital structure in Libyan business environment. The results of cross-sectional OLS regression show that both the static trade-off theory and the agency cost theory are pertinent theories to the Libyan companies’ capital structure whereas there was little evidence to support the asymmetric information theory. The lack of a secondary market may have an impact on agency costs, as shareholders who are unable to offload their shares might exert pressure on management to act in their best interests. Kayhan and Titman (2007) examine firms’ histories and their capital structures. They found that these variables have a substantial influence on changes in capital structure. Their study revealed that stock price changes and financial deficits (the amount of external capital raised) have strong influences on capital structure dynamics. They further observed that their effects are subsequently at least partially reversed. These results indicate that although a firm’s history strongly influence their capital structures, that over time, financing choices tend to move firms towards target debt ratios that are consistent with the tradeoff theories of capital structure.

The impact of capital structure on firm’s financial performance was examined by Onaolapo and Kajola (2010) in Nigeria usingsample of thirty non- financial firms listed on the Nigerian Stock Exchange for the period spanning between 2001 and 2007. They observed that a firm’s capital structure surrogated by debt ratio, has a negative significantly effect on the firm’s return on asset and return on equity. In the same vein, Ningi and Usman (2017) reviewed the effect of capital structure on financial performance of deposit money banks in Nigeria and they opined that capital structure has direct impact on financial performance of deposit money banks in the country. They were of the opinion that one of the important financing decisions of banks that is closely related to its survival is capital structure decisions. Then, taken into consideration the advantages of using debts, such as monitoring the conducts of managers as well as tax shielding ability, it is imperative for banks managers according to them, to explore less costly debt financing opportunities to finance their operations.

1. **METHODOLOGY**

The relationship between the capital structure and financial sector performance in Nigeria would be empirically investigated using multiple regression models by considering the following general specifications:

Where y is the variable of firm performance, X is a vector of independent variables (capital structure), i denotes the selected banks listed in SEC, whilst t means the time. The i subscript depicts the cross-section dimension and t represents the time series dimension. φ is a scale, β is K\*1 , Xit is the ith observation on K explanatory variables and μ stands for the disturbance term.

Furthermore, most of the panel data applications employ a one-way error component model for the disturbances as:

Generally, combining equation 1 and 2, the specification of panel regression model is given below:

Specifically to this study, a panel regression model that expresses the relationship between the firm performance (ROA, ROI and ROE) and capital structure (total debt ratio and equity-asset ratio) is stated as follows:

Where BP denotes bank’s performance and CS represents capital structure, X represents other determinants of firm’s performance, and V is the white noise error term.

**Panel Regression Model**

The 14 banks under consideration (Access bank, GTB, UBA, Unity bank, First bank Plc, Sterling bank, Polaris bank, Union bank, Key stone bank, Eco bank, Zenith bank, FCMB, Fidelity bank and IBTC) would be pooled together using the regression model stated below:

Where, AGE represent the age of each bank, EPS is earning per share, INF denotes rate of inflation at time t while GDP stands of gross domestic product over time. All other variables are as defined before.

Specifically, for each of these sectors selected the following regressions models would be considered for the following firm’s performance indexes:

Where, ROA is the return on asset.

Where, ROI represents return on investment.

Where, ROE equals return on equity.

**Method of Data Analysis**

This paper is designed to examine the relationship between capital structure and financial sector performance in Nigeria. In this article descriptive and inferential statistic would be employed as tools of data analysis. The panel multiple regression models would be used to investigate the association between financial sector performance and CS of selected banks (Access bank, GTB, UBA, Unity bank, First bank Plc, Sterling bank, Polaris bank, Union bank, Key stone bank, Eco bank, Zenith bank, FCMB, Fidelity bank and IBTC).

Specifically, the study would employed fixed and random effects panel regression model techniques to ensure all encompassing analyses that would controlled for the problem of heteroskedasticity and autocorrelation in the data that might be present in the model. Furthermore, Husman’s test would be carried out to confirm the necessity or otherwise of random effect panel model estimation. This would be carried out using E-views statistical software.

1. **RESULTS AND DISCUSSIONS**

**Table 1: Descriptive Statistics**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ROA | ROE | ROI | EPS | AGE | ER | DR | GDP | INF |
| Mean | 0.021437 | 0.555167 | 15175073 | 0.431725 | 11.35000 | 46.61875 | 33.41575 | 64548.47 | 8.394517 |
| Median | 0.020768 | 0.151280 | 4016522. | 0.221000 | 8.50000 | 39.66500 | 21.16000 | 63218.72 | 8.357677 |
| Maximum | 0.069442 | 4.421380 | 64026135 | 1.730000 | 19.00000 | 174.1800 | 141.6700 | 101489.5 | 17.86349 |
| Minimum | 0.002825 | 0.025512 | 111041.0 | 0.060000 | 5.000000 | 1.700000 | 0.740000 | 37474.95 | 2.000000 |
| Std. Dev. | 0.012584 | 1.055440 | 19944040 | 0.464154 | 5.89472 | 48.02510 | 39.17619 | 18553.05 | 3.248273 |
| Skewness | 1.381401 | 2.619315 | 1.270742 | 1.582543 | 0.080359 | 1.073155 | 1.161617 | 0.779244 | 0.243119 |
| Kurtosis | 6.706681 | 8.832003 | 3.456712 | 4.475985 | 1.708240 | 3.459322 | 3.211855 | 3.056259 | 3.447916 |
|  |  |  |  |  |  |  |  |  |  |
| Jarque-Bera | 35.62094 | 102.4258 | 11.11288 | 20.32718 | 2.824122 | 8.029376 | 9.070503 | 4.053416 | 0.728428 |
| Probability | 0.000000 | 0.000000 | 0.003863 | 0.000039 | 0.243641 | 0.018049 | 0.010724 | 0.131769 | 0.694743 |
|  |  |  |  |  |  |  |  |  |  |
| Sum | 0.857465 | 22.20669 | 6.07E+08 | 17.26900 | 854.0000 | 1864.750 | 1336.630 | 2581939. | 335.7807 |
| Sum Sq. Dev. | 0.006176 | 43.44418 | 1.55E+16 | 8.402134 | 4629.100 | 89950.00 | 59856.19 | 1.34E+10 | 411.4997 |
|  |  |  |  |  |  |  |  |  |  |
| Observations | 266 | 266 | 266 | 266 | 266 | 266 | 266 | 40 | 40 |

Cross sections 171 171 171 171 171 171   
Source: Author’s computation, 2020

Notes: ROA= returns on asset, ROE= returns on equity, ROI= return on investment, EPS = earnings per share, AGE= age of the institutions, ER= equity debt ratio, DR= total debt ratio

The values of means and medians as shown in Table.1 indicate average and median values which are typical average or representatives of the set of variables employed in the paper. For instance, the ROA, ROE and ROI average values for the 14 selected commercial banks in Nigeria between the periods of 2000 and 2019 stood at: 0.0214, 0.5552 and 15.1750 respectively; while the mean values for earning per share (EPS) and age of the selected commercial banks (AGE) stood at 0.4371 and 11.35 years respectively, while the average values for equity and debt ratio were 46.6 and 33.3 in that order. The degree of asymmetry as measured by the skewness statistics in Table 1 showed that all the variables used in the model were positively skewed. That is, their frequency distributions have a longer tails to the right of the maximum than to the left. The implication of this is that most of the series in the model have positive values. Also, the degree of peakedness of the distributions for the variables employed as measured by Kurtosis in the table were examined in relative to normal distributions as confirmed by the values of Jarque-Bera statistics. The probability values (0.0000) of Jaque-Bera statistics in Table 1 which were less than the critical value (0.05) for all variables used confirmed the normality of residuals at 5% confidence level.

**Correlation Analysis**

**Table 2: Correlation Coefficient Matrix**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ROA | ROE | ROI | EPS | AGE | ER | DR | GDP | INF |
| ROA | 1.000000 |  |  |  |  |  |  | -0.101458 | 0.127027 |
| ROE | 0.679414 | 1.000000 |  |  |  |  |  | -0.249929 | 0.243625 |
| ROI | -0.023007 | -0.284934 | 1.000000 |  |  |  |  | 0.272606 | -0.151398 |
| EPS | -0.010024 | -0.169267 | 0.005361 | 1.000000 |  |  |  | -0.054737 | -0.189483 |
| AGE | 0.271278 | 0.134843 | 0.057894 | -0.107994 | 1.000000 |  |  | -0.345450 | -0.281935 |
| ER | 0.202619 | 0.099518 | -0.144158 | 0.065776 | 0.264478 | 1.000000 |  | 0.093770 | 0.325966 |
| DR | 0.052845 | -0.012604 | -0.072670 | -0.134692 | -0.195129 | 0.492287 | 1.000000 | 0.216400 | 0.461494 |
| GDP | -0.101458 | -0.249929 | 0.272606 | -0.054737 | -0.345450 | 0.093770 | 0.216400 | 1.000000 | 0.139104 |
| INF | 0.127027 | 0.243625 | -0.151398 | -0.189483 | -0.281935 | 0.325966 | 0.461494 | 0.139104 | 1.000000 |

**Source: Author’s computation, 2020**

Table 2 shown correlation coefficient matrix of variables used in the paper, for instance, the connections between ROA and ROE, AGE, equity ratio, DR and inflation rate were positive within the period of analysis, while there exist negative correlation between ROA and ROI, EPS and GDP as indicated in the table. Furthermore, equity ratio and debt ratio demonstrate correlation coefficients of 0.0995 and -0.0126 with the returns on equity (ROE) of the selected banks under the period of study. Moreover, returns on investment of the selected banks exhibits negative correlations with equity ratio (-0.1445) and debt ratio (-0.0726), while in most cases, earning per share shown negative correlation coefficients with AGE, DR, GDP and INF and thus indicates absence of multicollinearity among the explanatory variables.

**Panel Regression Estimates**

**Table 3: Random Effects Panel Regression Estimates**

**Method: Pooled EGLS (Two-way Random Effects)**

**Cross-sections Included: 190**

**Total Pool observations: 266**

**Dependent Variable: ROA**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Coefficient** | **t-Statistic** | **Prob.** |
| **Constant** | 0.0364 | 9.4031\* | 0.0000 |
| **Equity ratio** | 0.0315 | 3.6911\* | 0.0003 |
| **Debt ratio** | -0.0210 | -3.4075\*\* | 0.0020 |
| **Age** | 0.0203 | 4.6107\* | 0.0000 |
| **Earnings per share** | 0.4001 | 4.7862\* | 0.0000 |
| **GDP** | -0.0211 | -1.4567 | 0.5211 |
| **Inflation** | 0.0423 | 5.8752\* | 0.0000 |
| **R-Square** | 0.8915 |  |  |
| **Adjusted R-Square** | 0.8651 |  |  |
| **F-statistics** | 19.303 (0.000)a |  |  |
| **Durbin-Watson statistics** | 1.8968 |  |  |
| **No of Banks** | 14 |  |  |

**Source:** Author’s computation, 2020

aprob(F-statistic) critical: prob < (0.01, 0.05)

\*, \*\* represent significant at 1% and 5% confidence level respectively

The paper adopted random effect estimation technique as reported in Table 3 because Huasman’s test confirmed it to be better than the fixed effect. From the table, all variables except gross domestic product (GDP) proved statistically significant at 1% and 5% confidence levels. The variables of interest that captured capital structure (equity and debt ratio) came out with parameter estimates of 0.0315 and -0.0210 respectively, which means an increase in equity ratio could result to a change in the selected banks returns on asset (ROA) and a fall in debt ratio could to a rise in their ROA. Macroeconomic variable such a inflation rate has been prominent in the investment decision of selected banks with the periods under review, for instance, as indicated from Table 3, other things being equal, a 1 per cent increase in the rate of inflation could lead to about 4 per cent rise in the ROA of the commercial banks in Nigeria. The R-square (0.8915) and adjusted R-square (0.8651) proved the goodness of fit for the panel model employed. F-statistic (19.303) with prob (0.0000) asserted to the joint significance of explanatory variables on the dependent variable, while the value of DW (1.8968) indicates absence of serial correlation in the error terms.

**Table 4: Random Effects Panel Regression Estimates**

**Method: Pooled EGLS (Two-way Random Effects)**

**Cross-sections Included: 190**

**Total Pool observations: 266**

**Dependent Variable: ROE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Coefficient** | **t-Statistic** | **Prob.** |
| **Constant** | 0.0211 | 5.1401\* | 0.0000 |
| **Equity ratio** | 0.0403 | 4.7811\* | 0.0000 |
| **Debt ratio** | 0.0390 | 3.7605\* | 0.0000 |
| **Age** | 0.0654 | 3.4107\*\* | 0.0300 |
| **Earnings per share** | 0.0451 | 3.5762\*\* | 0.0100 |
| **GDP** | 0.0101 | 1.9067 | 0.5811 |
| **Inflation** | 0.0227 | 3.4452\*\* | 0.0200 |
| **R-Square** | 0.7895 |  |  |
| **Adjusted R-Square** | 0.7561 |  |  |
| **F-statistics** | 16.303 (0.000)a |  |  |
| **Durbin-Watson statistics** | 1.9968 |  |  |
| **No of Banks** | 14 |  |  |

**Source:** Author’s computation, 2020

aprob(F-statistic) critical: prob < (0.01, 0.05)

\*, \*\* represent significant at 1% and 5% confidence level respectively

The two-way random effect estimates presented in Table 4 shown all explanatory variables to be positive and statistically significant (except GDP) within the period of analysis. The paper variables of interest (equity ratio and debt ratio) that captured capital structure came out as expected, such that, they exhibit direct relationship with the dependent variable (ROE). For instance, a 1 per cent increase in equity ratio and debt ratio could lead to about 4 per cent and 3 per cent rise in returns on equity respectively within the period of study. Earnings per share with coefficient (0.0451) and age of the banks (0.0654) also indicate a positive relationship with the ROE, while one of the macroeconomic variables (GDP) also came out positive (0.0101) but statistically insignificant at 5 per cent confidence level. The R-square (0.7895) and adjusted R-square (0.7561) confirmed the model employed was of a good fit. The F-statistic (16.303) with probability value (0.0000) indicates that the hypothesis joint significance of independent variable could not be rejected. As said before, the Huasman’s test proved that the random effect estimates could performed better than the panel fixed effect, thus the decision to analyze based on the former.

**Table 5: Random Effects Panel Regression Estimates**

**Method: Pooled EGLS (Two-way Random Effects)**

**Cross-sections Included: 190**

**Total Pool observations: 266**

**Dependent Variable: ROI**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Coefficient** | **t-Statistic** | **Prob.** |
| **Constant** | 0.0111 | 4.6431\* | 0.0000 |
| **Equity ratio** | 0.0320 | 3.7869\* | 0.0000 |
| **Debt ratio** | -0.0511 | 3.4361\*\* | 0.0050 |
| **Age** | 0.0212 | 4.8745\* | 0.0000 |
| **Earnings per share** | 0.0267 | 5,1124\* | 0.0000 |
| **GDP** | 0.0315 | 2.3451 | 0.6137 |
| **Inflation** | 0.0467 | 5.3456\* | 0.0000 |
| **R-Square** | 0.8601 |  |  |
| **Adjusted R-Square** | 0.8432 |  |  |
| **F-statistics** | 20.651 (0.000)a |  |  |
| **Durbin-Watson statistics** | 2.1201 |  |  |
| **No of Banks** | 14 |  |  |

**Source:** Author’s computation, 2020

aprob(F-statistic) critical: prob < (0.01, 0.05)

\*, \*\* represent significant at 1% and 5% confidence level respectively

Table 5 shown the estimates of the effects of; equity ratio, debt ratio, age, earnings per share, GDP and inflation rate on returns on investment (ROI) of selected commercial banks in Nigeria. The parameter estimates of equity ratio (0.0320) and debt ratio (-0.0511) indicate that the former had a positive relationship with the ROI while the latter exhibited a negative connection with the ROI. Meaning that, within the period under study, a rise in equity ratio could lead to increase in ROI while reverse was the situation in case of debt ratio, such that, a 1 per cent rise in equity ratio lead to about 3 per cent increase in ROI, however, a fall of about 5 per cent in ROI could result from 1 per cent rise in debt ratio as shown in Table 5. Other explanatory variables came out positive and statistically significant except the gross domestic product.

1. **CONCLUSION AND RECOMMEDATION**

The paper examined the impact of capital structure on financial sector performance with a specific reference to commercial banks in Nigeria using a dynamic panel data estimation technique. It was observed that equity ratio and debt ratio played significant roles on the performance of commercial banks in the country, but equity ratio shown a more positive effect on the selected performance indexes (returns on asset, returns on equity and returns on investment) employed in the paper. The debt ratio was seen to have negative impact on the ROA and ROI and thus a disincentive to the growth of this sub-sector; this could be as a result of accumulated debts, unpaid debts or bad debts. Other important variables affecting the performance of commercial banks as revealed from this study are; earnings per share, age of the banks and inflation rate in the country. The paper therefore recommends that banks in the country should manage their equity-debt mix optimally such that conscious strategies are adopted in their various loan policies in order to ensure sustainable performance.

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