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CAPITAL STRUCTURE COMPOSITION AND FINANCIAL PERFORMANCE: EMPIRICAL EVIDENCE FROM QUOTED DEPOSIT MONEY BANKS IN NIGERIA

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ABSTRACT: *This study investigates the effect of capital structure composition on the financial performance of deposit money banks in Nigeria. This study employs the ex post facto research design, and data were obtained for the selected deposit money banks from factbook covering 2009-2018 financial year. Data estimation was done using the Ordinary Least Square (OLS) techniques. Descriptive statistic, correlation, and time-series regression analysis were further conducted. Some residual diagnostic test and model selection criteria were employed to ascertain the good fit of the model using E-views 9 econometric package. Findings from the empirical analysis show that debt-equity ratio, debt-capital employed ratio, and equity-capital employed ratio have significant and positive correlation with return on total assets which is the surrogate for firm performance for the study period. The study recommends that in the face of trade-off in capital structure decision, DMBs should have an optimal mix of capital structure, and should also monitor the dynamics and level of leverage that could eliminate the tax shield and reduce return on total assets.*

KEYWORDS*: Capital structure, Financial performance, DMBs*

JEL Codes: G21, G32

INTRODUCTION

The capital composition or capital structure embodies the financial framework of corporate entity which comprises of the debt and equity employed to finance the firm assets and overall operations. The decision on capital composition has been a continuous process, mostly when the need for financing project emanates. Nevertheless, one of the most significant and challenging financing decisions confronting corporate entities is the decision of capital composition. Further decision challenge as regards capital composition is the issue of having an optimal capital configuration. The relevance of capital composition in any corporate organisation is not unconnected to the nexus that exist between capital composition and the firm financial performance; as the performance of the business is central to the value of the firm and thus, its survival.

Studies on firm financial performance and optimal capital composition have considered the cost and benefits of adopting any capital composition or even having a mix structure of capital. Moreso, arguments persist in finding the optimum capital structure of debt and equity, which maximise firm values mostly when targeted capital structures are associated with risk and returns. Therefore, striking a balance between the risk and returns in the firm's operation is considered essential in capital structure meddling (Ajayi & Zahiruddin, 2016).

Interestingly, theories have been developed to support the relevance and irrelevance of firms capital composition. Among the popular and foremost existing theory of capital structure is the publication by Modigliani and Miller (1958) where the capital configuration is said to be irrelevant in a perfect market

assumption. This breaking contribution of Modigliani and Miller (MM), under the perfect capital market assumption, posit that in the absence of bankrupt cost and taxes, where there are rational investors and perfect competition, and the capital markets are frictionless, the firm's value is independent with the structure of the capital.

However, the criticisms from scholars regarding the assumptions MM based their conclusion, and other corporate finance theories such as the agency theory by Jensen and Meckling (1976), the Pecking order theory by Donaldson (1961) and popularised by Myer (1984), the trade-off theory by Kraus and Litzenberger (1973), the dynamic trade-off theory suggested by Myer (1984), the market timing theory by Baker and Wurgler (2002), among others, have paved the way for a firm to determine the optimal capital structure to enhance the firm value and performance.

Continuous interrogation of the optimal capital structure among Deposit Money Banks (DMBs) in Nigeria is paramount, because even of recent, and with the acclaimed robust bank recapitalisation and consolidation banks still face financial performance distress. Could there be a missing gap between capital composition and regulatory capital requirements?

Notwithstanding the adjustment in the capital structure as well as cautious regulatory capital requirement, some of the DMBs still faced liquidity squeeze in 2009 leading to intervention by the CBN (Yakubu, Baba & Ibrahim, 2016). The sum of six hundred and twenty billion naira (N620bn) was injected into three banks by the CBN (Platinum Habib Bank Plc, Afribank Bank Plc & Spring Bank Plc) in the form of Tier 2 capital and after that nationalised them (Yakubu et al., 2016). Recently, Polaris Bank Limited was established to assume the defunct Skye Bank's ownership as well as assets and liabilities. In the same vein, Diamond Bank merger with Access Bank got the approval of the CBN and becomes effective in the first half of 2019. (Collins, 2018). The intervention was acknowledged as a rescue for the affected banks. However, it is very vital that the players (DMBs) evaluate the best financing mix, which gives the optimum returns and minimises the cost of financing for the banks.
To this effect, therefore, analysts and policymakers have expressed conflicting thoughts as to which of the components of capital available to DMBs boost their profitability.

In the extant literature, differing views have been put forward in regards to the level of debt and equity employed particularly by DMBs. First, a positive relationship was established between high equity-to-debt ratio and firm profitability such that firms depend more on owners' funds than borrowed funds. The second is a relationship between high debt-to-equity ratio and firm profitability such that firms rely more on borrowed funds relatively to owners' funds, and a positive correlation was observed among these studies (*Ogebe, Ogebe & Alewi, 2013;* Goyal, 2013; Akinyomi, 2014; Tedy Noer & Lukytawati, 2015; Yinusa, Ismail, Yulia & Olawale, 2019). Most of these studies focussed more on the entire financial sector. The last scene shows a middle position between owners' funds and borrowed funds. The choice of any given scenario at any time, however, depends basically on the cost to finance borrowed funds. This study scrutinises the component of capital that is critical to the financial performance of DMBs listed on the floor of the Nigerian Stock Exchange.
The broad objective is to examine the effect of capital structures on firm financial performance. Specifically, the study objectives are to:

1. scrutinise the effect of debt-to-equity ratio on the return on total assets;
2. determine the effect of debt-to-total capital employed ratio on the return on total assets; and
3. examine the effect of equity-to-total capital employed ratio on the return on total assets.

In line with the objectives, the study raises the research questions, and the research hypotheses were formulated in the null form**.**

The study examines the capital structures on firm financial performance. It focuses on the effect debt to equity ratio, debt to total capital employed ratio and equity to total capital employed has on the financial performance proxy by Return on Total Assets of the NSE quoted Deposit Money Banks for the period 2009-2018.

REVIEW OF RELATED LITERATURE

Conceptual Review

Capital Structure

The capital composition is an essential decision in firms and is associated with firms production and operating activities. Funding production and operations, there is much demand for financial resources. These resources are either acquired by way of debt, with an interest cost or in the form of equity which gives the providers a required rate of return. As both types of financial resources carry a cost. Benjamin (2003) opines that there exist a reasonable expectation of having an optimal mix of debt and equity that reduces the total cost.

The traditional approach (Modigliani and Miller, 1958) to guiding the optimal financial structure concludes that "firms should use as much debt as possible" on the principle that generally debt has a lower cost than equity. This view alludes that, under conditions of perfect markets and cost-less and free-flowing information access, modifying a firm's capital composition does not change the firm's value or owner's wealth. However, there is considerable evidence that the outcome reflected in such a proposition is not evident in practice and that small firms especially seem to develop structures that have a minimum, rather than a maximum, amount of debt (Chittenden, Hall & Hutchinson, 1996). The capital structure is mostly measured in terms of total debts to assets, long term debts to total assets, debt to equity (Nirajini, 2013; Austine, 2014).

Financial Performance

The essence of financial performance measures is to assess how efficient and effective available resources of firms are turned out to create wealth for the shareholders (Khan, 2004). It is the process of measuring the outcome of a firm's policies and operations in monetary terms. According to Iswatia and Anshoria (2007), performance is the function of the ability of an organization to gain and manage the resources in several different ways to develop a competitive advantage. Financial performance emphasises on variables related directly to financial report. Almajali, Alamro and Al-Soub (2012) argue that there are various measures of financial performance. For instance, return on sales reveals how much a company earns in relation to its sales, return on assets explain a firm's ability to make use of its assets and return on equity reveals what return investors take for their investments.

Financial statement analysis is key to help appraise the financial performance of a firm by extracting useful performance ratios which help management in identifying deficiencies and take corrective action to improve performance (Mudida & Ngene, 2010). According to McLaney (2009), a way of understanding financial performance of a firm is to gather insight on business performance, it is useful to calculate ratios to measure performance trend of a firm over period and industrial comparison against other firms. This study employs the return on total assets as our proxy for financial performance. Our choice of return on total asset is based on the conclusion that total assets (sum of non-current and

current assets) are the only source that generates revenue when put in operation and of which all claims can be made on it. Also, performance is a cycle of firm activities to achieve objectives is measured from an appreciation of what the firm own or control as at the end of the reporting date.

Firm Size

Firm size involves the complex, large, and diverse nature of the firm. Boone et al. (as cited in Habbash, 2010) find that, as firms become more extensive and more diversified, the size of the board increases. Thus, the size and level of complexity of a large firm can make capital composition decision more complicated because of divergent interest on risk and returns. Nevertheless, all firms exist to grow very large. This is because firm growth serves as a motivation for stakeholders like Investors, Employees, Suppliers, Government and the Society at large. When firms enlarge, investors feel a high level of satisfaction that directors and management are utilising organisational resources and gaining opportunities owing to the large firm size. Econometrically, this study proxy firm size by the natural logarithm of total assets and it was included among the explanatory variables as a control variable.

Underpinning Theory (The Trade-off Theory of Capital formation)

The continuous debate and development of theories regarding the relevance and irrelevance of capital structure have continued to shape and align studies in different sectors of different economies. In Nigeria, due to the peculiarity associated with DMBs and the various interventions by the apex bank (CBN) to protect investors from bankruptcy and liquidation cost together with the contention by managers regarding high cost of equity and the tax savings benefit of borrowed funds, this study anchor on the trade-off theory. Though, there exist other relevant corporate finance theories such as the agency theory by Jensen and Meckling (1976), the Pecking order theory by Donaldson (1961) and popularised by Myer (1984), and the market timing theory by Baker and Wurgler (2002), we consider the trade-off theory suggested by Myer (1984) as appropriate for this study.

The trade-off theory regarding the composition of capital structure holds that a company chooses how much debt to equity finance to use by balancing the cost and benefits. A firm's optimal debt ratio is determined by a trade-off between the financial distress cost and tax advantage of borrowing. The novel version of the trade-off theory emanates out of the debate over the Modigliani-Miller theorem. When the corporate income tax was added to the original irrelevance, this created a benefit for debt in that it served to shield earnings from taxes. The trade-off theory says that the firm will borrow up to the point where the marginal value of tax shields on additional debt is just offset by the increase in the present value of the possible cost of financial distress. The value of the firm will decrease because of financial distress (Myers, 2001). The theory also weights the benefits of debt that result from shielding cash flows from taxes against the costs of financial distress associated with leverage.

Empirical Review

Capital structure and Financial Performance

The MM theory, as earlier stated was criticised owing to the unrealistic and weak assumptions portrayed. This criticism has provided a premise for the evolution of other theories and for studies to reflect the market imperfections on the performance or value of the firm. MM(1963) maintained that because of the debt tax shield, levered firm reports higher firm value than the unlevered firm. Opposing evidence is revealed by Stiglitz (1969) who posit that higher debt capital yield risk of bankruptcy and reduces the value of the firm. In another perspective, more debt increases the earnings of the firm owing to the tax shield associated with debt capital. Thus, the correlation involving the performance of firm

and their capital structure composition can either have a positive outcome or negative evidence. This inconsistency in empirical findings has necessitated more recent research in finance.

Among these recent research is the study by Akinyomi (2013) who conducted a study to investigate the effect of capital structure on financial performance on manufacturing companies in Nigeria for the period of 2007 to 2011. Among other variables, findings from his study reveal that there is a significant and positive relationship between debt to common equity and return on equity (ROE) being a proxy for financial performance. However, Long-term Debt to Capital was found to have an inverse relationship on return on assets. More recent studies also show a significant and positive relationship between debt to equity financing and financial performance in the Nigerian DMBs and other country sectors, most notably when short term debt is utilised (Uwalomwa & Uadiale, 2012; Al-Tally, 2014; Adesina, Nwidobie & Adesina, 2015).

Further, a study conducted by Gweyi and Karanja (2014) on the effect of financial leverage on financial performance using a sample of 40 saving and credit co-operative societies for the period 2010 to 2012 shows a secure positive link between debt to equity ratio and ROE but weak positive link when ROA was surrogated for financial performance.

An empirical study conducted by Olivier (2014) to find out the effect of capital composition on the financial performance of firms operating in emerging markets shows that in the first quintile (lower debt levels), debt to equity ratio has a positive relationship. In line with the trade-off theory, the study further reveals that there is an optimal level of debt where debt starts decreasing in its marginal benefit. However, a correlation and regression analysis using ordinary Least Square (OLS) shows a negative nexus between leverage and return on equity at 1% significant level. This means that higher debt yields lower returns for equity holders. This finding is in line with the findings by Uchechukwu and Kingsley (2016); Ramadan and Ramadan (2015).

These studies validate the study by Pouraghajan (2012) who investigates the relationship between capital structure and financial performance using ROA and ROE as proxies for financial performance, while debt ratio among others were surrogates for capital structure. Evidence from their result shows that firms can improve their performance by reducing the debt ratio, that is to say, that leverage is negatively associated with ROA. Also, findings by Ronoh and Ntoiti (2015) from Kenyan DMBs reveals an inverse relationship between debt-equity and financial performance surrogated by ROA.

Abubakar (2015) examined the association between financial leverage and financial performance of DMBs in Nigeria. Financial leverage was proxied by debt-equity ratio and debt ratio with ROE of DMBs in Nigeria as a surrogate for financial performance. Using a sample of 11 DMBs from a population of 23 for the period 2005 - 2013, the result of the correlation analysis reveals a negative and significant relationship between debt-equity ratio and financial performance at 5% significant level. This indicates that DMBs with more leverage report lower ROE but may have high returns using other performance indicators.

METHODOLOGY

This study employs an ex post facto research design that allows the researcher to examine how the independent variable affects a dependent variable. The population of the study covers all DMBs quoted on the floor of the NSE with available data for the study period. The choice of DMBs and the exclusion

of other non- financial service companies were predicated on the generic and peculiar nature of regulations that exist for financial service companies and how such regulation changes their operations and capital structure decision. This was necessary in order not to hamper and undermine the generalisability of the study findings in relation to the capital structure theories. Specifically, the total number of DMBs as at the study period was twenty-three [23] (NSE, 2019). However, occasioning from the practical difficulties of accessing the population, and the challenge of available data for all the DMBs during the study period, the convenient sampling technique is employed in selecting the sample of ten (10) DMBs for 2009-2018 financial years.

Secondary data was used for the study. The secondary data was retrieved from published financial statements of the sampled DMBs for 2009 -2014 financial years from Factbook. The data analysis method use d in this study is the descriptive statistical method used together with a time-series regression analysis. However, before the time series regression was conducted, some necessary residual diagnostic tests such as multicollinearity, serial correlation, Heteroskedasticity, and Model Misspecification test were conducted.

Model Specification and Data Analysis Plan

The model of this study examines the effect of capital structure and firm performance of DMBs in Nigeria. To achieve this objective, we firstly propose the following models on time series data. The model identification spells out return on total assets as a function of debt-equity, debt0capital employed, equity-capital employed and firm size (control variable). In the first model specification, we tested the relationship between the different aspects of capital structure in addition to the control variable FIRM SIZE [FSIZE]) and the absolute value of return on total assets as a proxy for financial performance individually. Secondly, we regressed the various capital structure derivatives (explanatory variables) including the control variable against return on total assets (explained variable) collectively. The model partly builds on the studies of Akinyomi (2013) and Onipe and Helen (2015). The model for the study is specified thus;

$$ROTA_t = \beta_0 + \beta_1 DBEQU_t + \beta_2 FSIZE_t + \mu_t \quad \text{.....(1)}$$

$$ROTA_t = \eta_0 + \eta_1 DBCE_t + \eta_2 FSIZE_t + \mu_t \quad \text{.....(2)}$$

$$ROTA_t = \gamma_0 + \gamma_1 EQUCE_t + \gamma_2 FSIZE_t + \mu_t \quad \text{.....(3)}$$

$$ROTA_t = \phi_0 + \phi_1 DBEQU_t + \phi_2 \eta_1 DBCE_t + \phi_3 EQUCE_t + \phi_4 FSIZE_t + \mu_t \quad \text{.....(4)}$$

Where

ROTA = Return on total assets
DBEQU = Debt-equity ratio
DBCE = Debt-capital employed ratio
EQUCE = Equity-capital employed ratio
FSIZE = Firm size

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PRESENTATION, ANALYSIS AND DISCUSSION OF RESULT

Table 1: Descriptive Statistics

	DB/EQU	DB/CE	EQU/CE	ROTA	FSIZE
Mean	0.533511	0.140705	0.4172	0.308132	7.5395
Median	0.12675	0.146236	0.24198	0.036751	6.381674
Maximum	1.393531	0.325086	0.68709	0.61118	8.6311
Minimum	0.35987	0.006876	0.02556	-2.6318	4.3125
Std. Dev.	0.800646	0.089721	1.319654	12.16898	11.151
Skewness	-5.71334	0.192853	-2.47376	0.171403	7.13584
Jarque-Bera	3334.015	26.17972	215.1478	442.4107	5850.477
Prob	0.000	0.0000	0.000	0.000	0.000

Source: Researchers compilation (2019)

From the descriptive statistics of the variables as shown in table 1 above, it is observed that the mean for DB/EQU is 0.5335 with a minimum and maximum ratio of 0.3598 and 1.3935 respectively and standard deviation stood at 0.8007. The Jacque-Bera-statistic stood at 3334.015 and the p-value of 0.00 which indicates that the data is normally distributed at 5% level of significance ($p<0.05$) and as such selection bias is unlikely in the sample. It is observed that the mean DB/CE ratio stood at 0.140 with a maximum and minimum value of 0.325 and 0.0068 respectively. The Jacque-Bera-statistic is 26.179 and the p-value of 0.00 and indicates that the data is normally distributed at 5% level of significance ($p<0.05$) and as such selection bias is unlikely in the sample. It is observed that the mean EQU/CE ratio is 0.4172 with a maximum and minimum value of 0.687 and 0.0256 respectively. The standard deviation is 1.3296 with a Jacque-Bera-statistic of 215.1478 and p-value of 0.00 which indicates that the data is normally distributed at 5% level of significance ($p<0.05$) and as such selection bias is unlikely in the sample. ROTA has a mean value of 0.308 with a maximum and minimum value of 0.611 and -2.632 respectively. The standard deviation is 12.1689, and the Jacque-Bera statistic of 442.4107 and p-value of 0.00 indicates that the presence of outliers is unlikely in the data. FSIZE used as control variable has mean value of 7.5393 with a maximum and minimum value of 8.631 1and 4.3125 respectively. The standard deviation is 1101 which is very high indicating the presence of high volatility in the PE values across the distribution. The Jacque-Bera statistic of 5850 and p-value of 0.00 indicates that the presence of outliers is unlikely in the data.

Table 2: Pearson Correlation Results

	DB/EQU	DB/CE	EQU/CE	ROTA	FSIZE
DB/EQU	1.0000				
DB/CE	0.3127	1.0000			
EQU/CE	0.6322	0.5410	1.0000		
ROTA	0.1691	0.1605	0.0762	1.0000	
FSIZE	-0.0388	0.1255	0.2429	-0.0507	1.0000

Source: Researchers compilation (2019)

Table 2 above presents the Pearson correlation coefficient result for the variables. The positive correlations suggest that an increase in one variable is associated with an increase in the other and vice-

versa. Also, negative correlations suggest than an inverse association between the variables. Though it should be noted that correlations do not necessarily suggest functional dependence between the variables. As observed, ROTA is positively correlated with DB/EQU (r=0.1691), DB/CE (r=1605) and with EQU/CE (r=0.0762).

Table 3: Variance Inflation Factor Test

Variable	VIF
DB/EQU	1.35
DB/CE	1.17
EQU/CE	1.11

Source: Researcher's compilation (2019)

The variance inflation factor (VIF) explains how much of the variance of a coefficient estimate of a regressor has been inflated, as a result of collinearity with the other regressors. Essentially, VIFs above 10 are seen as a cause of concern as observed, none of the variables has VIF's values more than 10 and hence none gave a serious indication of multicollinearity.

Table 4. Regression Result

Variable	Aprori Sign	ROTA			
		A	B	C	D
C		-1.0223* (0.6166) {0.1048)	-0.7194* (0.4717) {0.000}	1.5985* (0.0279) {0.000}	1.3757 (0.7313) {0.0720}
DB/EQU	+	3.2331* (0.6401) {0.0000}			0.83385* (0.3621) {0.023}
DB/CE	+		0.5085* (0.1576) {0.004}		0.8754* (0.3217) {0.007}
EQU/CE	+			1.3757** (0.7313) {0.0720}	0.00270* (0.00134) {0.045}
SIZE				-0.0192 (0.0162) {0.2482}	0.01041* (0.0227) {0.000}
R^2		0.3177	0.491	0.4322	0.6359
Adjusted R^2		0.2653	0.45	0.319	0.5233
f-statistics		2.7398	4.897	2.5203	9.8492
Prob		0.000	0.000	0.000	0.000
Durbin Watson		*1.83*	*1.63*	1.87	1.81

Source: Researchers compilation (2019)

The regression result presented in Table 4 shows the effect of leverage measures on financial performance. In column A, the debt-equity ratio is regressed on ROTA and the model parameters show an R^2 value of 31.77% with an adjusted value of 0.2653. The f-statistics is significant at 5% which suggest that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected. It is also indicative of the joint statistical significance of the model. The

analysis of coefficients reveals that DB/EQU has a significant (p=0.000) and positive (3.233) effect on ROTA. In column B, debt-capital employed ratio is regressed on ROTA and the model parameters show an R^2 value of 49.1% with an adjusted value of 0.45. The f-statistics is significant at 5% which suggest that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected. The analysis of coefficients reveals that DB/CE has a significant (p=0.004) and positive (0.5085) effect on ROTA.

In column C, equity-capital employed ratio (EQU/CE) is regressed on ROTA and the model parameters show an R^2 value of 43.22% with an adjusted value of 31.9%. The f-statistics is significant at 5% which suggest that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected. The analysis of coefficients reveals that EQU/CE has a positive (1.3757) effect on ROTA which is significant at 10% (p=0.0720). In column D, we combine all the leverage measures and regress on ROTA and the model parameters show an R^2 value of 63.59% with an adjusted value of 52.33%. The f-statistics is significant at 5%. The results supports previous estimation outcomes as the coefficients reveals that DB/EQU has a significant (p=0.023) and positive (0.834) effect, equity-capital employed ratio (EQU/CE) has a positive (0.0027) effect and also significant at 5% (p=0.045) and debt-capital employed ratio (DB/CE) has a positive (0.8754) which is significant at 5% (p=0.007).

We observed that individually, the (R^2) explanatory power of each regressor is low and could not explain many variations in the regressand. However, the explanatory power of the combined independent variables could explain about 64% of the variation in the dependent variable. This suggests that an optimal capital mix could influence the performance of banks in Nigeria positively. This is in line with the trade-off theory which exhibits a trade-off between the tax shield benefit in borrowings and the financial distress in high leverage while considering the interest of equity capital providers.

The regression diagnostics is presented in Table 5 and the Breush-Goffery LM test for serial correlation test for the presence of stochastic dependence between the errors across time and as can be observed, the probability value of the F-stat (0.5435) confirms that the null hypothesis of no serial correlation in the residuals is accepted at 5% level. The white test for Heteroskedasticity also shows that the p-value (0.578) of the F-stat (0.369) confirms that the null hypothesis of no homoscedasticity is accepted at 5% level. Finally, the Ramsey specification test also confirms that the appropriateness of the functional specification of the model.

Table 5: Regression Diagnostics

B-G LM test for serial Corr	
F-statistic	0.6242
*Obs*R-squared*	1.5578
Prob.	0.5435
Prob. Chi-Square	0.4589
Heteroskedasticity Test: White	
F-statistic	0.36912
Prob (f)	0.57821
Scaled explained SS	12.337
Prob. Chi-Square	0.5239
Ramsey Reset Test	
t-statistic	0.9269
f-statistic	0.9269
Likelihood	0.9172

Source: Researchers compilation (2019)

Test of Hypotheses

Correlation results generated in Table 2 and the regression result from table 4 having a P-value row was used to test the various Hypotheses. The decision to reject or accept the stated null hypotheses is a function of the will be dependent on the result obtained from the comparison of the probability value (P-value) and the chosen significant significance of 0.05. The decision rule holds that the null hypothesis (H0) be rejected if the P-value is less than 0.05 level of significance, or accept it if the P-value is greater than 0.05 level of significance.

Test of Hypothesis One, two, and three

The correlation and regression results in Table 2 and 4 shows that the Pearson Correlation between debt-equity ratio, debt-total capital employed, equity-total capital employed and ROTA have a positive relationship with 0.1691, 0.1605, and 0.0762. The control variable (firm Size) shows a negative correlation with -0.0507. Also, at 5% and 10 % significant level, the regression result in table 4 shows a positive and significant relationship for three explanatory variables connected with the explained variable (ROTA) with the P-value of 0.0000 (DB/EQU), 0.004 (DB/CE), and 0.0720 (EQU/CE). However, there is an insignificant negative control variable with p-value of 0.2482(FSIZE). This means that rejection is accepted for the null hypotheses for DB/EQU, DB/CE, and (EQU/CE) which shows a significant relationship at 0.05 and 0.1 significant level. Nevertheless, we fail to reject the hypothesis for firm size having a negative correlation (-0.0192) with (p-value=0.2482) identified to be more than the significant levels. We conclude that there exists significant and positive relationship among debt-equity ratio, debt-total capital employed, equity-total capital employed on the financial performance of deposit money banks in Nigeria.

DISCUSSION OF FINDINGS

This study investigates the relationship between capital composition and financial performance of selected deposit money banks in Nigeria. Ten (10) DMBs was selected for a period of 2009 – 2018. The findings from the Mean value of debt to equity ratio which is 0.5335, shows that debt is about 5 times higher than equity. This may further suggest that DMBs in Nigeria are taking good advantage of tax shield associated with debt. Debt to capital employed ratio which stood at 0.1407, suggesting that about 14% of the total capital employed is financed by debt. The equity to capital employed ratio having a mean value of 0.4172, suggesting that equity is about 41% higher than debt. This may suggest that low debt utilisation could be a factor. The mean value of return on total asset suggests that for every N1(one Nigeria naira) investment in total assets of the firm, about 30 kobos is generated as a return. We conclude that, for the period under examination, DMBs in Nigeria have more preference for long term debt over equity and are not highly levered. Findings also show that in the presence of common stock, preferred stock, and minority interest, equity supersedes debt application regarding total capital employed. However, the return on total assets was low. This may not be unconnected with the high debt attracting a fixed charge which reduces the cash generation or profitability.

CONCLUSIONS AND RECOMMENDATION

Following the study findings discussed above, the study concludes as follows: That DMBs in Nigeria are not highly levered as confirmed by the debt-equity ratio showing little difference. This further suggests that selected banks in Nigeria use less equity in their capital structure composition. The relationship shows that an increase in debt usage over equity will yield some level of increase in total assets. This finding aligns with Akinyomi (2013), Al-Tally (2014); Adesina, Nwidobie and Adesina

(2015). It contradicts the findings of Olivier (2014); Ramadan and Ramadan (2015); Uchechukwu and Kingsley (2016). Moreso, Debt-total capital employed maintained a positive and significant relationship.

The further conclusion holds that equity to total capital employed has a non-inverse relationship, though with a weak significance. Firm size could not show a positive correlation may be due to a conflict of interest between management and shareholders, and the fact that large firms attract government regulations and statutory obligation.

From the study findings, we recommend that in the face of trade-off in capital structure, DMBs should have an optimal mix of capital structure, and should also monitor the dynamics and level of leverage that could eliminate the tax shield and reduce the return on total assets. However, the study further recommend that high level of debt should be used by management and board of directors provided that shareholders are satisfied with it and that such debt used in operations that could increase the total assets mostly the cash and cash equivalent components and the property plant and equipment and reduced weighted average cost of capital.

The study further suggests that the usage of more debt should be channelled towards financing real investment that has encouraging net present value. Also, management and directors should enhance access to funds for lenders and depositors other than equity capital providers.

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