Capital Structure and the Shareholder Value of Commercial Banks in Nigeria

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Abstract—This research paper evaluated the effect of capital structure on the shareholders' value of commercial banks in Nigeria. Data for the study was collected from the annual financial statement of ten (10) commercial banks for a period of nine (9) years spanning 2009 to 2017. The Panel least square regression method was utilized as the method of data analyses. From the results recorded, it was shown that there is a negative and non-significant relation between leverage ratio and the earnings per share of commercial banks in Nigeria. The findings also showed that there is a positive but non-significant relationship between leverage ratio and the dividend payout. From the findings, it concluded that gearing has a negative effect on the shareholders value of commercial banks in Nigeria. This manifests in reduced profitability which by extension leads to reduction in earnings to shareholders. However, this may not lead to reduction in dividend payout to shareholders as new debt financing will likely mean that more of the earnings will be distributed as dividends as opposed to being retained in the business since debt has filled the financing gap. Drawing from the above, we conclude that commercial banks in Nigeria do not operate optimal capital structures. It is our recommendation that banks conduct an in depth study of their capital mixes in order to understand how best to optimize their capital structures for better performance in the future.

Index Terms—Capital structure, shareholders value, leveraging, commercial banks, dividend payout, earnings per share.

I. INTRODUCTION

Broadly speaking, there are two main sources of capital available to a business organization. First is the internal sources in the form of equity and retained earnings. The second is the external sources in the form of debt. Within these two basic forms are subsumed different configuration of business funding from which a firm can draw from in the course of its operations. The mix of both sources in an organization's capital is what is referred to as capital structure and the decisions as to the nature of the organization's capital structure is critical to its success or failure. If it takes on too much debt, the organization may run the risk of going bankrupt while too much equity may translate into a large tax burden and perhaps funding shortfalls for projects. Thus, discerning business organizations keep a very close watch on their capital

structure.

According to Prakash, Iqbal, Quadras and Joseph (2017), a firm can choose any proportion of debt and equity. It can issue more debt and less equity or less debt and more equity. While comparing debt with equity, debt is less costly but it has some limitations as it affects the company's leverage after a certain limit. A debt to equity is calculated by dividing total liabilities by stockholder's equity. It indicates the proportion of debt and equity. A high debt equity ratio means company is highly levered and it is more depending on debt than equity. Due to additional interest expense, it can result in volatile earnings.

Gitman (2003) stated that the value of a business organization is maximised when its cost of capital is minimized. Hence, it the cost of debt is very low, the organization may increase its debt capital. However, if the cost of equity is lower, the reverse will be the case. The kind of combination of debt and equity that will minimize the firms cost of capital and hence maximizes the firm's profitability and market value is the optimal capital structure. Unfortunately, the capital structure decisions is not so straight forward as financial managers do not have a defined method of determining what the optimal capital structure should be instead, they rely on past experience, current business realities to make the capital structure decision.

There has been numerous research on capital structure of listed companies in Nigeria. However, the vast majority of them were focused on the how capital structure affects certain financial performance such as return on assets, return on equity, profitability with very little coverage of its effect on shareholder value related metrics such as earnings per share, dividends, stock market returns, etc (Nwude & Anyalechi, 2018; Ajayi & Zahiruddin, 2016; Anarfo, 2015; Ihenetu, Iwo and Ebiware, 2016; gebe, Ogebe & Alewi 2013). Consequently, This research intends to bridge this gap in research by focusing on the effect of the capital structure decision of commercial banks on shareholders value in Nigeria for the post consolidation period from 2009 to 2017.

The specific objectives of this research work are as follows:

- To determine the effect of capital structure on the earnings per share of commercial banks in Nigeria
- To determine the effect of capital structure on the dividends payout of commercial banks in Nigeria

The following hypotheses were tested:

Ho₁: Capital structure does not significantly affect the earnings per share of commercial banks in Nigeria

Ho₂: Capital structure does not significantly affect the dividends payout of commercial banks in Nigeria

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II. UNDERLYING THEORIES

Several theories have been proposed to shed light on the importance of capital structure in the performance of business organizations. These include among others: Capital structure irrelevance theory by Modigliani and Miller (1958); Pecking order theory by Donaldson (1961) and modified by Myers and Majluf (1984); The trade-off theory by Kraus and Litzenberger (1973); Each of these theories covers specific aspects of capital structure and makes proposal as to how to optimize firm performance in the presence of capital constraints. Modigliani and Miller (1958) proposed that in a perfect capital market where is free flow of information, the absence of corporate tax, transaction and agency cost - that capital structure is not relevant in determining the value of the organization. However, the perfect capital market priviso is difficult if not impossible to achieve.

The Pecking order theory proposes that firm managers rank their sources of finance in order preference - preferring to rely on the least risky and least expensive source (internal sources - retained earning) and only consider external financing where internal sources are not available, prefer internal financing when comparisons to external financing and if the external financing is necessary, hence, then opt for least risky option first before the much riskier ones like debt. The trade-off theory by Kraus and Litzenberger (1973) assumes that there is an indirect positive relationship between leverage and firm performance because a low performance level may increase bankruptcy risk. They consider that there is an optimal capital structure in which the firm value will be maximized and the cost of capital will be minimized. This optimal structure is reached when bankruptcy cost is equal to tax benefits (Hani & Zouhour 2019). However, achieving the optimal capital structure that offsets the bankruptcy risk remains elusive.

III. REVIEW OF CONCEPT

A. Capital Structure

As stated earlier in this paper, there two main sources of capital available to a business organization. First is the internal sources in the form of equity and retained earnings. The second is the external sources in the form of debt. Within these two basic forms are subsumed different configuration of business funding from a firm can draw from in the course of its operations. The mix of both sources in an organization's capital is what is referred to as capital structure and the decisions as to the nature of the organization's capital structure is critical to its success or failure. According to Prakash, Iqbal, Quadras and Joseph (2017), a firm can choose any proportion of debt and equity. It can issue more debt and less equity or less debt and more equity. In capital investment decision capital structure decision is the decision is made. While comparing debt with equity, debt is less costly but it has some limitations as it affects the company's leverage after a certain limit. Several factors contribute to determining the form a firm's capital structure takes. These include Firm size, risk inherent in debt and equity as sources of capital, corporate taxes, nature and size of assets, type of business, growth prospects of the

business, among others. Each of these factors will affect the decision of the firm to either borrow to finance new projects or to raise funds through equity offering or retained earnings.

B. Shareholders' Value

The Institute of Chartered Accountants in England and Wales (1999) define shareholder value from the investors' perspective as value created which is commonly measured as the growth in a company's share price over a period together with dividends received from it, the Total Shareholder Return (TSR). It is the value delivered to shareholders of a firm as a result of management action and ability to perform value maximizing operations over time leading to increase dividends and encourage capital gains for its equity owners. A company's shareholder value depends on strategic decisions made by its top management and board of directors including making wise investments in order to generate a healthy return on invested capital.

If this value is created over the long term, the share price increases and the company can pay larger cash dividends to shareholders. Companies can use this value focus both in their strategic planning process and in measuring performance. Forecasts of expected cash flows are commonly used in project, cash flow perspective to an appraisal of the performance of a whole company or business. Alternatively, economic profit measures of performance, including Economic Value Added (EVA), are calculated historically. The different measures capture different aspects of performance and there is no single 'right' measure of shareholder value created (ICAEW, 1999).

In the highly competitive business environment of today, management seeks to enhance future cash flows and create value by recognising and sustaining the company's sources of competitive advantage. Management's ability to develop a strategy which builds on the business's sustainable competitive advantage is a significant factor in the creation of shareholder value. Equally important is the ability to implement that strategy, to recognise and manage the risk inherent in the strategy and to identify future sources of potential competitive advantage, including trends in markets (ICAEW, 1999). Several metric are used to measure the shareholder value created. These include the earnings per share, Dividend payouts and market price per share. An increase in any of these measure is an indication that shareholders' value in the organization is growing and vice versa.

IV. REVIEW OF EMPIRICAL LITERATURE

Nwude and Anyalechi (2018) evaluated the influence of financing mix on the performance of commercial banks and the causal link between debt-equity ratio. The study which adopted the pooled OLS regression analysis, fixed effect panel analysis, and random effect panel analysis showed that while debt finance exert negative and significant impact on return on asset, the debt-equity ratio has positive and significant influence on return on equity. Furthermore, there was neither unidirectional nor bidirectional relationship between capital structure and performance of commercial

banks in Nigeria.

Eniola, Adewunmi and Akinselure, (2017) focused on capital structure and profitability of selected quoted banks in Nigeria. The study was based on secondary data obtained from the annual financial reports of the selected financial firms and adopted the ex-post facto research design. The findings revealed that there was significant relationship between capital structure and profitability because their proxy bank performance. The study thus recommended that investor must pay more attention to the capital structure mix of quoted banks before investing in them.

Ajayi and Zahiruddin, (2016) examined the effect of capital structure on the performance of firms in Nigeria. Using a sample of 100 non-financial quoted firms for the period spanning 2010 to 2014for which data was collected from annual financial statements and analyzed using a panel data approach. Findings of the study showed that assets turnover and tangibility have a positive and significant relationship with firm performance while risk maintains a negative and significant relations with performance. Thus, the study concluded that capital structure is an important determinant of the financial performance of quoted companies in Nigeria.

Gohar and Rehman, (2016) attempted to test the significance of the impact of capital structure on financial performance of banks listed on Karachi Stock Exchange. The study adopted the explanatory and deductive methodology and incorporated financial performance such as, spread ratio, return on assets and earnings per share, total debt to total equity, long-term debt to total equity and short-term debt to total equity. Findings showed that capital structure was significantly and negatively related with banks performance in Pakistan. From the findings, it was concluded that in the researches of capital structure the financial and non-financial sector cannot be combined because the relationships are opposite.

Ihenetu, Iwo and Ebiware, (2016) evaluated the impact of capital structure on the performance of banks in Nigeria. The research focused on identifying the relationship that exist between highly geared capital structure and lowly geared capital structure on performance indices such as return on equity and return on assets. The statistical tool applied was the ordinary least square (OLS) and the result showed that highly geared capital structure increases performance of deposit money than lowly geared capital. The research thus recommended that banks should employ more of debt capital in order to maximize return on investment, even when external debt is to be used, the banks should search for low interest bearing loans so that the benefit from the loan will exceed the financial cost associated with it etc.

Anarfo, (2015) sought to examine the relationship between capital structure and bank performance in Sub-Sahara Africa by employing the use of panel data techniques. The findings of the research showed that showed that a negative relationship between capital structure and bank performance. The results also indicate that capital structure does not determine bank performance but rather it is performance that determines banks capital structure.

Saputra, Achsani and Anggraeni, (2015) investigated the effect of capital structure on firm performance of financial

sector in the Indonesia. Panel data analysis was implemented to estimate the relationship between capital structure and firm performance. The findings showed that capital structure has negative effect on firm performance measured by ROA, consistent with the Pecking Order theory. Furthermore, capital structure has negative effect on securities companies, funding companies and other financial subsectors while capital structure has positive effect on banking and insurance subsectors.

Ogebe, Ogebe and Alewi, (2013) investigated the impact of capital structure on firm performance in Nigeria from 2000 to 2010. A static panel analysis was used to achieve the objectives of the study. Using fixed effect regression estimation model, a relationship was established between performance (ROI) and leverage, and a significant negative relationship is established between leverage and performance. From our findings, it was recommended that firms should use more of equity than debt in financing their business activities, this is because in spite of the fact that the value of a business can be enhanced with debt capital, it gets to a point that it becomes detrimental.

Awunyo-Vitor and Badu, (2012) empirically investigate the relationship between capital structure and the performance banks in Ghana. Data was collected from Ghana stock exchange and annual report of the banks and analyzed using panel regression methodology. The findings revealed that the banks are highly geared and this has a negative effect oon their performance. The study shows that the high level of gearing among banks can be attributed to their over dependence on short term debt as a result relatively high Bank of Ghana lending rate and low level of bond market activities. The research thus recommended that banks should intensify their efforts to rely on internally generated funds as their source of finance. It was further recommended that the govt of Ghana take steps to boost activties in the bonds market as a in order to create a new avenue for funding available to banks.

V. METHODOLOGY

The ex post facto research design was adopted for this study. The population of all commercial banks in Nigeria. However, ten (10) banks were selected on the basis of data and information availability. The commercial banks in the sample are Access Bank, Diamond Bank, Ecobank, Fidelity Bank, First City Monument Bank, First Bank, Guaranty Trust Bank, United Bank for Africa, Union Bank, Zenith Bank and Diamond bank. The data was collected by surveying existing data on the variables detailed below from the annual reports of the commercial banks in the sample. The data included those relating to capital structure proxied as leverage Ratio (LVR) and Shareholders value which is proxied as Earnings Per Share (EPS) and Dividend Payout (DVP) and Firm Size (FSZ). The Ordinary Least Square (OLS) multiple regression analysis method will be specified to test for the relationship between for the variables. This is expressed as:

y = a + b1X1 + b2X2 + + bnXn + u (1)

Where y = the dependent or outcome variable

a = constant term

X1, X2 ... Xn = set of independent variables or predictors b1, b2, ... bn = coefficients of the predictor variables and

u =the error term.

For the purpose of this research, it is proposed that Shareholder Value measured as Earnings Per Share (EPS) and Dividend Payout (DVP) are determined by capital strucutre as measured by Leverage Ratio (LVR). In its functional form, this is expressed as follows:

EPS = f(LVR, FSZ).... (2) DVP = f(LVR, FSZ).... (3)

The above denoted in its econometric form as:

 $EPS = \ \alpha + \beta 1 LVR + \beta 2FSZ + \epsilon i \ldots . \ (3)$

 $DVP = \alpha + \beta 1LVR + \beta 2FSZ + \epsilon i \dots (4)$

A priori Expectation = $\beta 1$, $\beta 3 > 0$

VI. DATA ANALYSES AND INTERPRETATION

TABLE I: REGRESIONS RESULTS FOR EARNINGS PER SHARE, LEVERAGE RATIO AND FIRM SIZE

Dependent Variable: EPS Method: Panel Least Squares Date: 08/09/19 Time: 20:32 Sample: 2009 2017 Periods included: 9

Cross-sections included: 10

Total panel (balanced) observations: 90

Variable Coefficient Std. Error t-Statistic Prob. 4.699467 1.056976 4.446142 \mathbf{C} 0.0000 LVR -0.047618 0.050666 -0.939852 0.3499 FSZ -0.231009 0.138218 -1.671335 0.0982 R-squared 0.035637 Mean dependent var 2.857444 1.870020 Adjusted R-squared 0.013468 S.D. dependent var S.E. of regression 1.857386 Akaike info criterion 4.108982 Sum squared resid 300.1396 Schwarz criterion 4.192309 Log likelihood -181.9042 Hannan-Quinn criter. 4.142584 F-statistic 1.607486 Durbin-Watson stat 0.825016 Prob(F-statistic) 0.206285

In Table 1 above, it is observed that there is a negative and non-significant relation between leverage ratio and the earnings per share of commercial banks in Nigeria. This means that increasing the leverage ratio of banks will lead to a reduction in their earnings per share. The coefficient of regression value of -0.0476 implying that a one unit increase in leverage ratio will lead to a 0.0476 units reduction in the banks earnings per share. However, firm size had a positive relationship with earnings per share meaning that the an increase in firm size is a predictor of higher earnings per share. However, firm size is also not statistically significant it is effect on earnings per share. Finally, the coefficient of determination (R-Squared) with a value of 0.0356 implies that leverage ratio and firm size as a unit can account for only about 3.56% of the variations in earnings per share.

TABLE I: REGRESIONS RESULTS FOR EARNINGS PER SHARE, LEVERAGE RATIO AND FIRM SIZE

Dependent Variable: DVP

Method: Panel Least Squares Date: 08/09/19 Time: 20:36

Sample: 2009 2017 Periods included: 9 Cross-sections included: 10

Total panel (balanced) observations: 90

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.065993	0.162637	0.405772	0.6859
LVR	0.007321	0.007796	0.939033	0.3503
FSZ	0.004301	0.021268	0.202220	0.8402
R-squared	0.010046	Mean dependent var		0.129878
Adjusted R-squared	-0.012711	S.D. dependent var		0.283996
S.E. of regression	0.285795	Akaike info criterion		0.365683
Sum squared resid	7.106069	Schwarz criterion		0.449010
Log likelihood	-13.45575	Hannan-Quinn criter.		0.399286
F-statistic	0.441454	Durbin-Watson stat		0.977214
Prob(F-statistic)	0.644533			

Table 2 shows that there is a positive relationship between leverage ratio and the dividend payout with the implication that increase in leverage ratio increase the funds available to be distributed as dividend to shareholders. The efficient of regression value of 0.00731 implies that a unit increase in leverage ratio will lead to 0.00732 units increase in dividend payout to shareholders. However, the result is not statistically significant with the implication that leverage ratio has only a minimal effect on dividend payout of commercial banks in Nigeria. Further, the results indicates that there is a positive non-significant relationship between leverage ratio and the firm size of commercial banks. This implies that bugger firms are predicted to payout higher dividends to shareholders. Finally, the value of the coefficient of determination (R-Squared) of 0.01004 implies that leverage ratio and firm size taken as a unit can only account for just about 1.005% of the variations in dividend payout of commercial banks in Nigeria.

VII. DISCUSSIONS OF FINDINGS

This research paper evaluated the effect of capital structure on the shareholders' value of commercial banks in Nigeria. Data for the study was collected from the annual financial statement of ten (10) commercial banks for a period of nine (9) years spanning 2009 to 2017. The Panel least square regression method was utilized as the method of data analyses. From the results recorded, it was shown that there is a negative and non-significant relation between leverage ratio and the earnings per share of commercial banks in Nigeria. This means that increasing the leverage ratio of banks will lead to a reduction in their earnings per share.

Eniola, Adewunmi and Akinselure, (2017) who focused on capital structure and profitability of selected commercial banks revealed that there was significant relationship between capital structure and profitability. This is somewhat contradictory to the findings of the present study since increased profitability as a result of leveraging should reflect in their earnings per share. But this appears not to be the case which may likely be as a result of increase in debt

repayment obligations. However, Awunyo-Vitor and Badu, (2012) in a similar study as Eniola, Adewunmi and Akinselure, (2017) found a revealed that high gearing had a negative effect on the performance of banks

The findings also showed that there is a positive relationship between leverage ratio and the dividend payout with the implication that increase in leverage ratio increase the funds available to be distributed as dividend to shareholders. However, the result is not statistically significant with the implication that leverage ratio has only a minimal effect on dividend payout of commercial banks in Nigeria. Saputra, Achsani and Anggraeni, (2015) who investigated the effect of capital structure on firm performance of financial sector in the Indonesia showed that capital structure has negative effect on firm performance measured by ROA, consistent with the Pecking Order theory. Similarly, Nwude and Anyalechi (2018) who evaluated the influence of financing mix on the performance of commercial banks showed that while debt finance exert negative and significant impact on return on asset, the debtequity ratio has positive and significant influence on return on equity.

VIII. CONCLUSIONS AND RECOMMENDATIONS

The contents of the journal are peer-reviewed and archival. The European Journal of Business and Management Research publishes scholarly articles of archival value as well as tutorial expositions and critical reviews of classical subjects and topics of current interest.

- appropriate to the complexity, of the work. For example, an obvious extension of previously published work might not be appropriate for publication or might be adequately treated in just a few pages.
- 2) Authors must convince both peer reviewers and the editors of the scientific and technical merit of a paper;

IX. CONCLUSION

The nature of banking business makes using debt as part of their capital funds a normal business. In most cases, borrowing provides the easier means of increasing their access to funds without going the long and torturous route of issuing new which many existing shareholders frown as it waters down their holdings. However, debt comes with added obligations which has the potential to reduce the value of expected returns to shareholders. Moreso in a financially volatile environment like Nigeria where interest rates are characteristically high and continually fluctuate with high margins. Thus, based on the findings of the research, it is concluded that gearing has a negative effect on the shareholders value of commercial banks in Nigeria. This manifests in reduced profitability which by extension leads to reduction in earnings to shareholders. However, this may not lead to reduction in dividend payout to shareholders as new debt financing will likely mean that more of the earnings will be distributed as dividends as opposed to being retained in the business since debt has filled the financing gap. Drawing from the above, we conclude that commercial banks in Nigeria do not operate optimal capital structures. It is our recommendation that banks conduct an in depth study of their capital mixes in order to understand how best to

optimize their capital structures for better performance in the future.

REFERENCES

- Ajayi, O.D. & Zahiruddin, B.G. (2016). Impact of capital structure on firm performance: empirical evidence from Nigeria, Journal of Economics and Finance, 7(4)III: 23-30.
- Anarfo, E.B. (2015). Capital structure and bank performance evidence from Sub-Sahara Africa, European Journal of Accounting Auditing and Finance Research, 3(3):1-20.
- Awunyo-Vitor, D. & Badu, J. (2012). Capital structure and performance of listed banks in Ghana, Global Journal of Human Social Science, 12(5)1.0.
- Donaldson, G. (1961), Corporate Debt Capacity: A study of corporate debt policy and the determinants of corporate debt capacity. Boston: Harvard University Press Paper No 6012.
- Eniola, O.J.; Adewunmi, A.A. & Akinselure, O.P. (2017). Impact of capital structure on the profitability of selected quoted banks in Nigeria, International Journal of Economics, Commerce and Management, V(1).
- Gitman, L.J. (2003) Principles of managerial finance. Boston: Addison Wesley/Pearsons education.
- Gohar, M. & Rehman, M.W.U. (2016). impact of capital structure on banks performance: empirical evidence from Pakistan, Journal of Economics and Sustainable Development, 7(1): 32-39.
- Goyal, A.M. (2013). impact of capital structure on performance of listed public sector banks in India, International Journal of Business and Management Invention, 2(10): 35-43.
- Hani, E. & Zouhour, E. (2019). Analysis of capital structure and performance of banking sector in Mddle East countries, International Journal of Economics and Financial Issues, 9(2), 1-11.
- Ihenetu, H.I.; Iwo, S. & Ebiware, A.E. (2016). Impact of capital structure on the performance of deposit money banks: a study of selected deposit money banks in Nigeria, International Journal of Economics and Business Management, 2(7): 23-34.
- Institute of Chartered Accountants in England and Wales (1999) Inside Out: Reporting on Shareholder Value, ISBN no. 1-84152-013-6, London.
- Kraus, A., Litzenberger, R.H. (1973), A state-preference model of optimal financial leverage. The Journal of Finance, 28(4), 911-922.
- Modigiliani F & Miller M. (1958). the cost of capital, corporation and theory of investment. American Economic Review, (18): 261 361.
- 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.
- Nwude, E.C. & Anyalechi, K.C. (2018). impact of capital structure on performance of commercial banks in Nigeria, International Journal of Economics and Financial Issues, 8(2), 298-303.
- Ogebe, P.; Ogebe, J. & Alewi, K. (2013). Impact of capital structure on firms' performance in Nigeria, Munich Personal RePEc Archive MPRA Paper No. 46173,
- Prakash, P.; Iqbal, T.H.; Quadras, J.M. & Joseph, N.R. (2017). capital structure and financial performance of banks, International Journal of Applied Business and Economic Research, 15(23)2: 303-312.
- Saputra, T.; Achsani, N.A. & Anggraeni, N. (2015). Effect of capital structure on firm performance: empirical evidence from the Indonesian financial industry, International Journal of Business and Management Invention, 4(8): 57-66.