

Capital Structure and Firms Performance: An Evidential Analysis of Consumer Goods Sectors

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ABSTRACT

The consumers goods sector has played a great role in the Nigeria economy, this is because there is no household that don't consumed one commodity or the other on th daily basis, hence if anything should affect the performance it will not only affect the entity alone but the economy at large, therefore we investigated the impacted impact of capital structure on the performance of consumers goods sector through a convenient sample, eight firms were selected for the study base on the availability of data i.e., 50% of the population which are: Cadbury Nigeria Plc, Dangote Sugar Refinery Plc, International Breweries Plc, NASCON Allied Industries Plc, Nestlé Nigeria Plc, Nigerian Breweries Plc, Unilever Nigeria Plc and Union Dicon Salt Plc. The regression out showed that on the average capital structure have impact on performance however individually they have no impact on performance therefore we recommended that owners of entities and mangers of entities should take the capital structure decision seriously, this is because on the single observation i.e. looking at only one aspect of capital structure it may not affect the entity however on the average it does and lastly no entity structure should be taken for granted reason been that is the single that will later form the whole.

KEYWORDS: Performance, Capital structure, Ratios, Consumer goods sector.

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I. INTRODUCTION

Over the years capital structure has played an important role in the success of every entity, this is because performance and the going concern of an entity will not be possible if the there is no structure set in place by the owners and managers of the entity. The capital structure has to do with the way an entity organized its resources to finance its daily and future activities, some owners and managers may prefer to use more of debt and little of internal sources or may decide to use an equal proportion however the reverse myth be the case in other entities. Siro (2013) putting the right entity structure in place is a very salient and crucial decision not only because of the need to maximize returns to entity in question but also the effect such a decision has on the entity ability to deal with its competitive environment and the factors influencing it. Etale, Edoumiekumo, Kpolode and Nkak (2020) the capital mix of an entity has to do with the organization of capital an entity uses for its economic activities hence is an important finance decisions, this may consist of debts and equities sources, the entity may use any of the aforementioned to finance its operations, any wrong combination or decisions taken by the key stakeholders of the entity may lead to the firms bankruptcy or extinction.

Etale (2020) asserted that "performance of an organization can be measured in terms of absolute profit, sales growth, assets growth, return on assets, return on capital employed, return on equity, earnings per share, among others, entity performance has also been inter-changeably used with profitability, organizational performance, corporate performance, financial performance, to mention but a few, in all return on assets or return on total assets is a better measure of performance that takes into account the interest of all the company's stakeholders (employees, suppliers, creditors, lenders, investors, shareholders, government, and the society at large)". Hence in in order for us to express the view of all stakeholders we shall employed the return on assets as a measure of entity performance. Edore and Ujuju (2020) leverage is the use of debt in a firm's capital structure in finance, capital structure refers to the way a corporation finances its assets through combination of equity, debt or hybrid securities. There is no individual that don't consume one commodity or the other as the day passes by, therefore the manufacturing sector play a great role in the Nigeria economy and if the capital structure of this sector is threatened it will not only affect the immediate staff of the entity but as well as the entire economy.

II. EMPIRICAL LITERATURES

Siro (2013) examined listed firms on securities exchange in Kenya on the nexus and effect of capital structure on financial performance employing variables such as return on equity which served as a proxy for performance while debt ratio served as proxy for capital structure employed secondary data which was obtained from the Nairobi securities exchange handbook and also in firm's publications with the help regression analysis model and found out that an inverse nexus exist between performance and entity structure and of the listed firms also the study further showed that the as the return on equity reduce the debt ratio increases, which means that internal sources are preferable to external sources of finance, the findings may also mean that the cost of financing is too high hence the entity if she must borrow should look for a cheaper sources. However the study negated the pecking order theory.

Etale, Edoumiekumo, Kpolode and Nkak (2020) carried an out an investigation of the quoted industrial goods on Nigeria Stock Exchange now Nigeria exchange group on the relationship between capital structure and firm's performance used secondary data ranging from 2014 to 2020 employed return on equity (ROE) as a dependent variable while Non-current debt to total assets (NCD), current debts to total assets (CD) and total debts to equity (TDE) were used as independent variable, five firms and multiple regression model was used in testing their hypotheses and discovered that NCD and TDE have a statistical significant relationship with ROE however TDE have a negative relationship with ROE, while the other independent variable CD has no statistical significant on performance hence recommended that long term financing should be consider first, also in considering the capital mix/structure of the firms while CD should be consider last with consideration to proper matching between equity and debt.

An investigation into the pecking order validity by Ogiewa and Ogiemudia (2019) using panel data of 2008 to 2017 collected from publication of the Nigeria stock exchange, the descriptive statistic, ADF statistic, Levin, Lin and Chut statistics, correlation analysis and panel regression techniques was used and discovered that capital structure is significant and negatively affects multinational firms' performance in Nigeria thereby confirming that pecking order theory is valid in Nigerian multinational firms, it was also discovered that among other variables used for the study except for firm size that was significant, the others such as board size, firm age and board independence considered were positively related to the performance of multinational firms in Nigeria however it was not significant, they recommended that managers of multinational companies should continue to prioritize such that they make use of the internally generated funds (retained earnings) first and if this source of finance has been exhausted, then resort to the use of debt capital and eventually equity source of financing.

Salamba (2015) investigated Dodoma Municipality in Tanzania SMEs performance viz a viz their capital structure 100 SME were selected which are stratified into textile shops, food vending, hardware and general supplies and secretarial and stationery, primary data was used with the help of Karl Pearson Coefficient of Correlation and simple regression analysis and found out that capital structure had negative impact on SMEs profitability also the study found that capital structure has a positive and significant impact on SMEs therefore recommended that entities should avoid situations where they are highly leveraged since this may lead to bankruptcy if they are unable to make payment on their debts and SME owners should also make good investment decisions in order to increase profitability, this study seconded Siro (2013).

Etale (2020) investigated Dangote cement company performance with respect to its capital structure, employed return on equity as proxy for performance (the dependent variable, while the proportion of long term debts to equity funding (DEFP) and the proportion of equity funding to total capital employed (ECEP) representing capital structure also ten years secondary data from 2010 to 2019 was used from the annual financial statements of Dangote cement company the hypotheses for the study was tested with the help of descriptive statistics and multiple regression techniques based on the E-view 10 software, the findings revealed that both DEFP and ECEP are positively related to return on equity (ROEQ), but the degree of impact is not statistically significant at 5% level therefore recommended that Dangote cement company should strive to maintain its 2010 debt-equity composition of 32.1% and 67.9% as the company recorded a highest rate of return on equity ever with that mix, and because debt and equity as this study has shown are both positively related to performance. Also the 32:68 debt-equity combination in 2010 provided a near optimal capital mix for the company.

Kpolode, Edoumiekumo and Alfred (2020) investigated 11 plc formally Mobil oil Nigeria plc capital structure and performance employed secondary data ranging from 2013 to 2019 prior the change of its name and post the change of its, the paired t-test was employed in their analysis, also variable for this study are return on equity (ROE), non-current debts to equity (NCDE) and equity to capital employed (ECE) the study discovered that Prior-ROE, Prior-NCDE and Prior-ECE respectively vis a vis the mean of the Post-ROE, Post-NCDE and Post-ECE are statistically significant the study further revealed that the change of name has effected the company significantly, therefore recommended that companies should engage in more sensitization for a specific period of time to keep the public aware before it change its name, the study above revealed that the

return on equity reduced significantly; and companies should keep creditors and other stakeholder aware and be cogent whenever the needs arise to change its name.

Edore and Ujuju (2020) examined the impact of capital structure on corporate performance in Nigeria, employed total debt to total assets, short term debt to total assets while the return on assets (ROA) served a proxy for corporate performance, the Ordinary least square regressions was applied on secondary data to determine the effect of independent variables on the dependent variable the findings revealed that Debt to equity, total debt to total asset and long term debt to total asset has positive and significant effect on return on asset (ROA) however short term debt to total asset has negative and insignificant effect on return on asset (ROA) therefore recommended that management of corporate firms in Nigeria should strive towards optimizing the debt to equity of their firm in order to increase the returns on asset and investment, entities should increase their commitments into capital structure in order to improve the total debt to total asset from their business and transaction to mention but a few.

Pecking Order Theory

This theory was introduced by Myers and Majluf (1984) this study is laid upon this theory, which believed that the core stakeholders (shareholders and managers) will like to finance economic activities with fund generated internally hence opined that there is no presence of optimum capital. Nirajini and Priya, (2013) in their study of capital structure on financial performance of the listed trading companies asserted that manager knows and have more sound information than external investors, prospective investors and the general public does not know about performance of the firm hence information asymmetry arises between stakeholders and managers, the study of Ogieva and Ogiemudia (2019) seconded the validity of the pecking order theory.

2.1 Evidence of research gap

The reviewed literatures so far, revealed that there is need to carry out more research in this area as a result of the contrary view on the issue, also the need to look at other sectors of the economy and also used recent economic data to infer economic and financial decision hence this has made us delve into this study to examine the impact of capital structure on the performance of selected consumer goods sector quoted on the Nigeria Exchange Group (NXG) using data ranging from 2012 to 2020.

III. METHODOLOGY

This study adopted ex-post factor to analyzed secondary data of selected consumer goods sector quoted on the Nigeria Exchange Group (NXG), we used this method because is more reliable as the researchers have no power to influence the data. Descriptive statistics and regression analysis was adopted by the researchers following the specified model below. The hypotheses were tested using the analyzed result from the study; the decision rule was to accept the hypotheses if the calculated the p-value is greater than 5% (0.05) significant level.

3.1 Population of the Study

As at the time of conducting this research, the total consumer goods sector firms quoted on the Nigeria Exchange Group (NXG) are 16, and they include Cadbury plc; Champion plc; Dangote sugar refinery plc; Flour Mills Plc; Guinness Nigeria Plc; International Breweries plc; McNichols plc; Nascon Allied industries plc; Nestle Nigeria Plc; Nigeria breweries plc; Nigerian Enamelware plc; Northern Nigeria flour mills plc; P Z Cussons Nigeria plc; Unilever Nigeria plc; Union Dacon Salt Plc and Vitafoam Nigeria Plc.

3.2 Sample and Sampling Techniques

Through a convenient sample eight firms were selected for the study base on the availability of data i.e., 50% of the population which are: Cadbury Nigeria Plc, Dangote Sugar Refinery Plc, International Breweries Plc, NASCON Allied Industries Plc, Nestlé Nigeria Plc, Nigerian Breweries Plc, Unilever Nigeria Plc and Union Dicon Salt Plc, therefore financial statement of the listed companies with nine years data ranging from 2010 to 2020 were analyzed..

1.3 Model of Specification

The study adopted a model which applied by other researchers such as Etale, Edoumiekumo, Kpolode and Nkak (2020). The model is as follows:

ROA = (DE, DTA, SIZE) The above was modified and transformed into regression equations as follows: $ROA = \alpha + \beta_1 DE + \beta_2 DTA + \beta_3 SIZE + \mu$

Where: ROA = refers to Return on assets, which is a dependent variable employed in measuring firms performance.

DE = Debt to equity ratio, independent variable that serve as component of capital structure.

DTA = Debt to total assets, independent variable ratio that serves as a component of capital structure

SIZE = Entity size, independent variable that serves as a component of capital structure.

α = constant in the equation above

μ = residual

$\beta_1 - \beta_3$ = the slope of the equation or coefficient of the independent variables

IV. RESULTS AND DISCUSSION OF FINDINGS

Data were extracted from the Nigeria Exchange Group (NXG) and the published annual report of the sampled companies which are presented in Table 1 below. These figures represent aggregate figures of the eight samples companies for the period covering 2012 to 2020, the absolute aggregate figures of book values was used.

Table one (Research Data)

YEAR	ROA	DE	DTA	SIZE
2012	0.12	0.56	0.22	7.82
2013	0.16	0.4	0.17	7.85
2014	0.13	0.33	0.17	7.92
2015	0.08	0.26	0.09	8.09
2016	0.07	0.32	0.11	8.04
2017	0.11	0.26	0.1	8.15
2018	0.08	0.61	0.23	8.19
2019	0.03	0.69	0.22	8.21
2020	0.04	0.28	0.1	8.28

Source: Researchers' Computations from Nigeria Exchange Group, 2020

The table above (one) showed the research variables used by the researchers in the study which cannot be influenced by the researchers.

Table two (Descriptive statistics)

	ROA	DE	DTA	SIZE
Mean	0.091111	0.412222	0.156667	8.061111
Median	0.080000	0.330000	0.170000	8.090000
Maximum	0.160000	0.690000	0.230000	8.280000
Minimum	0.030000	0.260000	0.090000	7.820000
Std. Dev.	0.042557	0.164832	0.057879	0.165261
Skewness	0.073436	0.642099	0.099377	-0.281686
Kurtosis	1.999240	1.801825	1.331755	1.675805
Jarque-Bera	0.383659	1.156795	1.058454	0.776579
Probability	0.825447	0.560796	0.589060	0.678216
Sum	0.820000	3.710000	1.410000	72.55000
Sum Sq. Dev.	0.014489	0.217356	0.026800	0.218489
Observations	9	9	9	9

Source: Researchers' Computations from Nigeria Exchange Group, 2020

Table two above showed the summary of our descriptive statistic for the study of the variables, ROA, DE, DTA and SIZE which has the mean values of 0.091111, 0.412222, 0.156667 and 8.061111 respectively with size haven the highest mean and ROA has the lowest mean value.

While the maximum values for ROA, DE, DTA and SIZE are 0.160000, 0.690000 and 0.230000, 8.280000 respectively with size haven the highest maximum value while ROA has the lowest maximum value.

Also the minimum values for ROA, DE, DTA and SIZE are: 0.030000, 0.260000, 0.090000 and 7.820000 respectively. The table two also indicated that debt to equity (DE) is most dispersed with a value of 0.164832 while return on asset (RA) is the least dispersed with a value of 0.042557.

The Jarque-Bera statistic showed the statistical value associated with ROA, DE, DTA and SIZE which are 0.383659, 1.156795, 1.058454 and 0.776579 which indicated absence of serial correlations.

Table three (Regression result)

Dependent Variable: ROA
 Method: Least Squares
 Date: 06/11/21 Time: 22:13
 Sample: 2012 2020
 Included observations: 9

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DE	-0.319775	0.169167	-1.890289	0.1173
DTA	0.821714	0.498152	1.649524	0.1600
SIZE	-0.140796	0.065348	-2.154569	0.0838
C	1.229164	0.534849	2.298153	0.0699
R-squared	0.828940	Mean dependent var		0.091111
Adjusted R-squared	0.726304	S.D. dependent var		0.042557
S.E. of regression	0.022264	Akaike info criterion		-4.470571
Sum squared resid	0.002478	Schwarz criterion		-4.382916
Log likelihood	24.11757	Hannan-Quinn criter.		-4.659731
F-statistic	8.076487	Durbin-Watson stat		2.489389
Prob(F-statistic)	0.023095			

Source: Researchers' Computations from E-view

From the analytical output in Table three above, the independent variables combined significantly explained the variations in the dependent variable with F-statistics probability value of 0.023095 (at 5% significant level). The R-squared (coefficient of determination) value 0.828940 indicated that 83% of changes in the dependent variable are accounted for by the combined effect of variations in the independent variables. Also, the adjusted R-squared value of 0.726304 indicated that the model used in testing the hypotheses for the study is a proper and good fit, with a confidence level of approximately 73% for acceptance of the goodness of the study model. Durbin-Watson statistics value 2.489389 is approximately equal to the 2.0 benchmark, which indicates the non-existence of serial auto correlation among the independent variables.

The regression showed that DE and Size is negatively statistical insignificant with a coefficient of -0.319775 and -0.140796 respectively with a p-value 0.1173 and 0.0838 respectively while the DTA has a positive but statistically insignificant with a coefficient of 0.821714 and a p-value of 0.1600, which supported Etale, Edoumiekumo, Kpolode and Nkak (2020) findings on the nexus between capital structure and entity performance however their study was carried out in a different sector, however negated Etale (2020) his study of capital structure and performance of Dangote cement company.

V. CONCLUSION AND RECOMMENDATIONS

We examined the impact of capital structure and performance consumer goods sector firms quoted on the Nigeria Exchange Group (NXG) of 8 sampled firms with secondary data extracted from the published financial statement of the companies covering from 2012 to 2020, using the regression techniques and output showed a statistical significant relationship between capital structure and performance, this implies that capital structure help in influencing the performance of firms, this findings contradict with the findings of Etale (2020). Therefore, we recommended that:

1. Owners of entities and managers of entities should take the capital structure decision seriously, this is because on the single observation i.e. looking at only one aspect of capital structure it may not affect the entity however on the average it does and
2. Lastly no entity structure should be taken for granted reason been that is the single that will later form the whole.

Further research

Future research can be carried out by interested researchers by increasing the sample size and also by using other performance proxy variable.

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