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Research Paper

Effect of financial leverage on financial performance of listed consumer goods firms in Nigeria

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ABSTRACT

This study examined the effect of financial leverage on financial performance of listed consumer goods firms in Nigeria. Data were collected from audited annual reports and accounts of 8 listed industrial goods firms in Nigeria from 2013-2022. Ex-post facto (after-the-fact) research design was adopted. Data were analyzed using Random Effect Regression. Results indicated that debt-equity ratio and long-term debt ratio hade had significant negative effect on financial performance while short term debt ratio had negative insignificant effect on financial performance. Over all, the study found that financial leverage has negative effect on cash value added of listed industrial goods firms in Nigeria. Recommendations are also made.

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1. INTRODUCTION

The business world has turned to a global settlement characterised by fierce competition such that for organisations to sustain a favourable financial performance requires holding tenaciously onto financial

decisions. Everyone who invests in any organisation does so with the primary objective that the return on his investments will be maximized after taking a reasonable risk [1], [2]. To this end, investors can only be willing to make investments in companies with increasing share prices which indicates the likelihood of boosting their wealth in the stock market [3], [4], [5], [6]. In respect to recent financial crises bedevilling the Nigerian economy manifesting in skyrocketing inflation, it has become difficult for many organisations to meet their financial obligations [7], and as such many of them are increasingly depending on financial leverage as source for them to fund their financial obligations, to keep an acceptable return on their investments, and to forestall the likelihood of going bankruptcy [8].

Financial leverage is a ratio that explains the point to which an organisation makes use of debts to fund opportunities with the expectation of getting gains in return [9], [10]. It is the deliberate use of borrowed money to invest in the business in order to boost the organisation's financial performance. In a situation where financial obligations of an organisation are partly footed with loans and equity that firm can be said to be leveraged [11], [12]. A lot of firms these days are using debts support their capital. By implication, firms are free to resort to debts in order to augment their assets so as to influence their financial performance [3], [5]. [1], [2] presented three ways of assessing financial leverage to include: debt to equity ratio, long term debt and short-term debt.

The debt-to-equity ratio (D/E) is a financial ratio that shows the portion of investors own money and borrowed money to fund the company's resources [2], [13]. This ratio analyses the credence of total debt and financial liabilities in relation to total shareholders' equity [14], [15], [16]. The analysis of this ratio reveals the proportion of a firm's money that emanates from creditors and investors [17]. While interpreting this financial ratio A higher debt to equity ratio is a practical exposition that a greater portion of the firms financing is gotten from bank loans as against shareholders [18].

Another form of leverage for firms is the short-term debt which is same as current liabilities [12]. This explains the financial involvements that should be paid in one year [19]. Short-term debt simply put is a financial assistant gotten procured by a firm in form borrowing whose repayment term does not exceed 12 months [20], [21], [22]. When preparing a firm's financial statement, short-term debts form part of the firms' liabilities [23], [13]. The third approach of determining a firm' leverage ratio is what is known as long term debt. This represents the portion of debt that a firm owe that can be paid in a period longer than 12 months [24]. On the liability side of a company's balance sheet, this debt appears as a non-current liability [25], [26], [27], [28]. Investors are relying on financial leverage to maximize the return on investment and achieve optimal financial performance [29], [30], [31]. This suggests that financial leverage of a firm has a link with its financial performance.

Financial performance is an assessment of a firm's level of effective utilization of it asset in a manner that eventually brings revenue to the firm [32], [33]. This term is also used to describe an inclusive analysis of a firm's general position in areas relating to the firm's assets, the liabilities of the firm, the concentration of equity, expenses incurred by the firm, the revenue generated into the firm and of course the firm's overall profitability [34], [35], [36], [37]. This assessment is done in series of approaches to ascertain a firm's potentials to run effectively [25], [38], [39]. One common and frequent measure of financial performance is cash value added. Cash value added as a measure of firm financial performance is the representation of a company's capability to create cash flow in excess of what is requisite to its investors [40], [41], [42].

There are studies across the globe that focusing on financial leverage, however scarcely are there known researches focusing on listed consumer goods firms in Nigeria [43], [44], [45], [1]. Studies like those of [20], [21], [22] were in Nigeria on quoted conglomerate and oil and gas companies respectively [29], [9]. focused on quoted agricultural firms in Nigeria. On the other hand, the construction/real estate and natural resources sector was researched by [20], [21], [22]. The striking observation that previous studies produced mixed findings prompted the current attempts to close the gap left in the consumer goods industry in Nigeria.

1.1 The Study Objectives

This study in broad terms seeks to examine the effect of financial leverage on financial performance of listed consumer goods firms in Nigeria. In specific terms, the study shall;

- Examine the effect of debt-to-equity ratio on financial performance
- Examine the effect of long-term debt on financial performance
- Examine the effect of short-term debt on financial performance of listed consumer goods firms in Nigeria.

1.2 Conceptual Review

1.2.1 Financial Leverage and Financial Performance

The connection between leverage and financial performance has been investigated by many researchers however the findings of these studies were not consistent. For instance, [46], [35] all reported positive and significant effect of debt-equity financing on firms' performance in Nigeria. On a contrary, a negative relationship was presented from the study by [47]. Elaborately, [48] reiterated that the cost of financing largely determines the effectiveness of short-term financing on profitability. Noteworthy here are the studies by [49] that confirmed a negative connection since the cost of obtaining debt outweighed the advantage of initiating the debt. In comparison [50], [51], [52], [53], [54], [55], [56] stated that optimal financial performance is traceable to firms that engage in short term debts than to their counterparts that engage in long term debts.

Achieving higher productivity in firms is fund to have a connection with debt obtained on long term basis as researched by [57]. In evaluating what could be responsible for variations in return on stocks, the study conducted by [32], [33] revealed that leveraging could be strong determinant. In search of reasons while firms alternate between long term and short-term debt, Sutomo (2020) uncovered that short term debts are more favourable to organisations where the cost of diversifying assets is high, however, long term debt works better for companies whose fixed asset ratio is larger.

There are proofs of financial leverage yielding a positive influence on profitability of firms as demonstrated in research carried out by [14], [17], Dey, [20], [21], [22], [58], [24], [26], [6]. However, there are still records of negative association between same variables as presented by [14], [59], [10], [28], [6], [12]. Leveraging may impede firms' performance, but it bails out firms when faced with external financing need in times of crisis [60]. Another set of studies professing a positive connection between leveraging and performance include studies by [61], [32], [62], [33], [63]. The variation in findings is predominantly noticed in cases where high leverage is adopted to build up costly marketing activities. Nevertheless, there is a likelihood of promoting the valuation of firm and averting possible distress by the instrumentality of marketing activities. Thus, this study is guided by the following null hypotheses:

$H0_1$: Debt to equity ratio has no significant effect on financial performance.

$H0_2$: Long term debt has no significant effect on financial performance.

$H0_3$: Short term debt has no significant effect on financial performance of listed consumer goods firms in Nigeria.

2. METHODOLOGY

The research method employed in carrying out this research was the Ex-post facto design. The study sampled 8 listed consumer goods firms that remained quoted o the floor of Nigeria Exchange Group (NEG) during the period of 1st January 2013 to 31 December 2022 with reports constantly submitted to NEG within the said period. These firms were: Cadbury Nigeria Plc, Guinness Nig Plc., Honeywell Flour Mill Plc, Nestle Nigeria Plc, Nigerian Breweries Plc. P Z Cussons Nigeria Plc., Unilever Nigeria Plc. and Vitafoam Nigeria Plc. We made use of secondary data pull up from annual accounts of these companies for 10 years (2013-2022). To ascertain the effect of independent variables on the dependent, variable Random Effect Regression analysis was chosen while p-value was used to test the hypotheses. These hypotheses were tested at 0.05 level of significance.

3. RESULTS AND DISCUSSION

Table 1. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
CVA	144	2.31e+07	3.12e+07	11587	1.27e+08
DE	144	.2464655	.4546368	0	3.489663
LTDTA	144	.1090154	.1183755	0	.5227015
STDTA	144	.3237531	.2449428	.0031121	.9507896

The dependent variable for this study, cash value added (CVA) as presented in Table *1* revealed an estimated lowest amount of ₦0.15 and a highest amount of ₦12.7. The average CVA during the period understudy is estimated at ₦ 2.31 with standard deviation of ₦3.21. This implies that the CVA is above 1 which makes the companies good for maintaining high rate of profitability.

Table 1 also reflects a mean value of 0.2464 with a fluctuation of 0.4546 in respect to DE ratio. The lowest and greatest values of DE ratio recorded are 0.00 and 3.42 respectively. The amounts here are indicating that not all the sampled industrial goods companies were leveraged whereas others have debts more than their shareholders' equity. Apparently, this result affords evidence that on average, the companies placed their shareholders at low risk since debts have a small proportion when compared with equity.

Table 1 also reflects a mean value of 0.1090 with a fluctuation of 0.1184 in respect to long term to total assets ratio. The lowest and upper values of this ratio during the study period are 0.00 and 0.5227 accordingly. The meaning of these figures is that some of the companies have not used long term debt in financing their assets while others finance their assets with about 50% with long term debts. Apparently, this result affords evidence that on average, the listed consumer goods firms in Nigeria firms have financed their assets with minimal long-term debts.

Furthermore, short term debts to total assets ratio revealed a mean with standard deviation values of 0.3238 and 0.2449 respectively. This result could be interpreted to connote that on average; the companies finance their assets with short term debts by 32.38%. The standard deviation suggests a low dispersion from the mean values of this ratio.

3.1 Test of Research Hypotheses

Table 2. Random Effect Regression Result

Variables	Coefficients	T	p>/t/
DE	-0.0058	-2.82	0.005
LTDTA	-0.0345	-4.28	0.000
STDTA	-0.0037	-1.08	0.279
-cons	1.0880	737.89	0.000
R^2	0.3022		
Prob>F	0.000		
Obs.	80		

The result in Table 2 above indicates that the aggregate effect of the explanatory variables (debt equity ratio, long term debts to total assets ratio and short-term debts to total assets ratio) and the explained variable (CVA) is estimated at 30.22 % as indicated by the R-squared while 69.78 % is determined by other variables that are not part of this study. The Model which is also significant at 1 % revealed it fitness and so provides adequate attestation that leverage has a significant effect on the CVA of listed consumer goods firms in Nigeria. Further analysis of the independent variables is done in the subsequent paragraphs:

The result also shows that DE ratio has a negative coefficient of -0.0058. This is verification that a unit variation in DE will trigger a decrease in CVA of listed consumer goods firms by 0.58 % and vice versa.

This result again shows that CVA will decrease with increase in debt financing vis-à-vis equity financing. Table *2* also revealed that long term debt to total assets ratio has a negative coefficient value of -0.0345. This implies that variability of LTDTA negatively influences the CVA. This result suggests that a percentage variation in LTDTA will lead to 3.45 % decrease in the CVA of listed consumer goods firms in Nigeria. Furthermore, the result revealed that short term debts to total assets ratio has a negative coefficient value of -0.0037. This implies that STDTA negatively influences the CVA of listed consumer goods firms in Nigeria during the period under study. This result is an indication that a percentage change in STDTA will lead to 0.37 decrease in the CVA of listed consumer goods firms in Nigeria.

3.2 Summary of Results

The test in Table 3 revealed the following findings:

- Debt-equity ratio has a p-value of 0.005 which is less than 0.05. for this the null hypothesis was rejected. Therefore, DE ratio has a significant effect on the CVA of those companies.
- Long term debts to total assets ratio have a p-value of 0.000 which is less than 0.05. on this note, the null hypothesis was rejected. The study therefore concludes that there is significant effect of long-term debts on the CVA of listed consumer goods firms in Nigeria.
- Short term debts have a p-value of 0.279 which is greater than the 0.05. This leads to the acceptance of the null hypothesis. The study therefore concludes that short term debts does not have significant effect on the CVA of firms under. Generally, the study found that financial leverage has negative effect on financial performance of listed consumer goods firms in Nigeria, confirming the results earlier obtained by [7] while [12] found financial leverage to affect financial performance negatively but significantly.

4. CONCLUSION

From the findings of this study, since all the variables of financial leverage are negative, it can be concluded that financial leverage has detrimental effect on financial performance of listed consumer goods firms in Nigeria. It is also concluded that long term solvency ratios are more relevant than short term solvency ratios. This shows that short term sources of finance are not good to finance long term investments in total assets. Based on the findings, the is recommended that management of listed consumer goods firms in Nigeria should increase the level at which they finance their assets with equity. By increasing this proportion, the reduced effect of repayment of both principal and interest could help in channeling such funds to other value creation activities.

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Author Contributions Statement

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Bridget Aladi Lawani	✓	✓	✓	✓		✓		✓	✓	✓	✓			
James Tersoo Tsetim		✓	✓	✓			✓	✓		✓	✓			✓
Habib Enatto	✓	✓	✓			✓	✓	✓		✓	✓		✓	✓

C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration

Va : **Va**lidation
Fo : **Fo**rmal analysis
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Fu : **Fu**nding acquisition

Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Informed Consent

All participants were informed about the purpose of the study, and their voluntary consent was obtained prior to data collection.

Ethical Approval

Not Applicable.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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