

Financial Leverage and Profitability of Quoted Consumer Goods Firms in the Disruptive Economy

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Abstract

This study investigated the Effect of Financial Leverage on Financial Performance of Quoted Consumer Goods Firm in Nigeria. Four objectives were developed and secondary data was generated from the annual reports and accounts of the sampled 16 consumer goods firms for a period of ten years (2013-2022). This study employed analytical software of Stata version 14 and Microsoft excel for the analysis. The secondary data collected was analyzed using descriptive statistics, correlation, and regression analysis. The test of hypothesis was carried out using ordinary least square regression at 5% level of significance. Findings reveal that Long-term debt to asset [coef. = -0.216 (0.101)] has an insignificant effect on profitability of listed consumer firms in Nigeria. While short term debt to asset [coef. = -0.332 (0.000)] has a significant negative effect on financial performance of the firm; Long term debt to equity [coef. = -2.884 (0.009)] has a significant negative effect on net profit margin; and Short-term debt to equity [coef. = 1.028 (0.005)] has significant positive effect on profitability of listed consumer goods firms in Nigeria. The study concludes that firms must choose the best financing sources when making informed decision to reach the optimal capital structure that would enable them to achieve positive returns. The study recommends improved and effective debt management practices to minimize the negative impact of short-term debt on profitability. This can be done by closely monitoring and managing debt levels, negotiating favorable interest rates, and optimizing the timing and structure of debt repayments.

Keywords: Financial Leverage; Long Term Debt to Equity; Short Term Debt to Equity; Long Term Debt to Asset; Short Term Debt to Asset; Net Profit Margin

Introduction

The decision as to how a company should acquire capital to finance its operations in the disruptive economy is an important one made by managers of companies around the world. Every firm whether small scale firms or large-scale firms need funds to operate and survive in a competitive market to be able to finance the purchase and use of assets that can enable them to compete with other companies in the market. Amahalu, Egolum, Nweze & Obi (2018), opined that a business concern can decide on different levels of capital structure such as, the mixture of

equity, debt and other financial facilities with equity having the emphasis on maximizing the firm's value.

Financial leverage is the use of debt to finance the assets of a company. Firms need to maintain a certain liquidity level to survive which can be achieved using debt (Ofule, Ezeagba, Ahamalu, Obi, 2022). Debts allow companies to make investments and gain returns on these investments. However, it is important to note that the use of high debt profile in this disruptive era can expose a company to financial risk that can impact on the ability of the company to survive. This is because companies must pay the principal and interest on debts and defaulting can cause a company to liquidate. It therefore, becomes important for companies to maintain an optimal debt level (Alao & Sanyaolu, 2020). On the other hand, having more than needed capital has a negative impact on the financial performance of a company as more capital that does not actively go into use by the company means increase in cost of capital.

Nevertheless, companies make use of short-term and long-term debt. Short term debts are financial obligations that are expected to be fulfilled in a year. These type of debt are often used by businesses to meet immediate financial needs or bridge the gap in cash flows (Arumona, Lambe, Idogho, 2020). Short-term debts carry risk and if a company is unable to pay, it can lead to liquidation and this will affect the financial performance of the company in a negative way.

More so, long-term debt which extends beyond the current year is usually used by companies to fund large capital expenditure or to finance major investments (Touvilla, 2022). Some examples of long term debts are corporate bonds, instalment loans, equipment financing etc. some researchers who used long term debt to measure financial leverage found either positive or negative result with financial performance of the company.

Furthermore, consumer goods firms are constantly engaged in the production of our day-to-day goods, hence, they need a sufficient capital structure to be able to operate in this disruptive era. The analysis of a company's financial health enables stakeholders like potential investors make informed decisions on performance of the organization (Ofule, Ezeagba, Amahalu, & Obi 2022) and the profitability of a business can be seen as the results of its operating and investing activities (Alao & Sanyaolu, 2020). Therefore, it becomes vital that what remains (net returns) after all expenses and costs have been subtracted from revenue of this firm will be encouraging (Murphy, 2023). A poor net profit margin might indicate to stakeholders that a company is on the verge of liquidating, and this can have a negative impact on the ability of a company to generate more capital (Ogiriki, Werigbelegha, and Avery, 2018).

Drawing from above, this study provides analyses of the possible effects that a company can face with the use of financial leverage and in doing so, recommends possible actions that can be taken by the managers of these companies to ensure a good financial health for these companies.

Statement of the Problem

In this disruptive era, the choice of an appropriate financing mix constitutes a critical decision for the survival and continuous growth of any business organization, not only because of the need to maximize returns to the various interest holders, but also because of the impact that such informed decision has on performance of the organization. The globalization of the financial market presented opportunities that financial managers can take advantage of when deciding on

what their capital structure should be made of. It is important to note that a manager deciding strictly to increasing the debt ratio in the capital structure of the company would increase the value to a desirable point. But further increase beyond that particular point in leverage would result in the increase of the company's overall cost of capital thereby decreasing its total market value.

Also, in recent times, organizations are faced with the financing decision of their capital expenditure. These financing choices are noted by certain variables such as long term, short term, profitability, growth, taxation amongst others. Thus the issue of what truly determines capital structure has remained a contentious issue in the Nigeria consumer goods firms (Amahalu, Egolum, Nweze & Obi, 2018).

Hence, this study necessitated to address this sectorial gap in literature by examining how financial leverage influences the Net profit margin of listed consumer goods firms in Nigeria.

Objectives of the Study

The main objective of the study is to examine the effects of financial leverage on the financial performance of quoted consumer goods firms in Nigeria.

The specific objectives are in line with the main objective which is to;

1. Examine the effect of long-term debt to equity on net profit margin of listed consumer goods firms in Nigeria.
2. Investigate the effect of short-term debt to equity on net profit margin of listed consumer goods firms in Nigeria.
3. Ascertain the effects of long-term debt to asset on net profit margin of listed consumer goods firm in Nigeria.
4. Determine the effect of short-term debt to asset on net profit margin of listed consumer goods firms in Nigeria.

2.0 LITERATURE REVIEW

Financial Leverage

According to Hayes (2022), financial leverage is when a company borrows money to make investment that could lead to greater returns. This means that financial leverage is built on the idea that if a company borrows cash to invest, such decision to borrow has the potential to pay off. Okolie (2021), defined financial leverage as the proportion of fixed interest capital (debt) in a company's financial structure. According to Arumona, Lambe, Idogo (2021), financial leverage can be defined as the use of external funds to finance the activities of an organization to increase the profitability of the organization.

Nevertheless, it is important for managers of companies to consider the positive and negative challenges of using financial leverage to finance their assets in this disruptive nation. The use of financial leverage becomes positive when earnings are greater than the cost of debts and negative when earnings are lower than the cost of debts. (Okolie, 2021).

Anifowose, Soyebbo, and Tanimojjo (2020), defined financial leverage as the use of debt to acquire additional assets. The use of financial leverage to control a greater amount of assets will cause the returns on the owner's investment to be improved thereby enhancing efficiency and

performance of a firm. There are advantages associated with the use of financial leverage, some of which include; it helps to invest in projects sooner rather than later. Financial leverage can help companies gain a competitive advantage. There are also disadvantages associated with the use of financial leverage and they include returns from investments made with debts are not guaranteed as businesses might face the risk of liquidation because of their inability to pay debts.

Short-Term Debt to Equity on Net Profit Margin:

This ratio is an important indicator of a company's financial health, as it indicates the extent to which the company relies on short-term debt (usually less than a year) to finance its operations. Generally, a higher short-term debt to equity ratio indicates that a company is relying more on short-term debt to finance its operations, which can increase its financial risk. This invariably, can lead to lower net profit margins, as the company may need to use a larger portion of its profits to service its debt obligations. **Mathematically: Short-term debt-to-equity = short-term debt/shareholder's equity**

Ofule, Ezeagba, Ahamalu, and Obi (2022), conducted a study on financial leverage and financial performance of quoted industrial goods firms in Nigeria. The results of the study revealed that Short Term Debt ratio significantly and positively relates to cash value added of the firms. While Arumona, Lambe, & Idogho (2021) found negative relationship between Short Term Debt and Net profit of listed consumer firms in Nigeria. These mixed results necessitated to this study.

Long-Term Debt-to-Equity Ratio and Net Profit Margin

Long-term debt consists of loans or other debt that are due in more than 12 months. It is a leverage ratio that compares the total amount of long-term debt against the shareholders' equity of a company (Tomasetti, 2023). Alhassan, 2021 opines a high ratio means that the company is using more debt and this has a negative effect on net profit because of increase in financing cost. It indicates that a company is prone to financial risk. This can lead to a lower net profit margin as interest expenses make up financing cost that are deducted from profit. A low long-term debt-to-equity ratio indicates that a company uses more equity than long-term debt for its operations. Hence, decrease in financing cost which can have a positive effect on net profit.

Mathematically: Long-term debt-to-equity ratio = Long-term debt/equity.

Ofule, Ezeagba, Ahamalu, and Obi (2022), conducted a study on financial leverage and financial performance of quoted industrial goods firms in Nigeria. The results of the study revealed that debt to equity ratio and Long-Term Debt ratio have a negative significant relationship on cash value added.

Short-Term Debt to Assets Ratio and Net Profit Margin

Short-term debt-to-assets ratio shows how much of a company's total assets are financed using loans and debts lasting for one year or less (Mboi, Muturi, & Wanare, 2018). Short-term debts-to-assets ratio measures a company's ability to meet its short-term obligations using its assets. It measures a company's liquidity and financial health, and helps investors and analysts to assess the company's ability to pay off its short-term debt as they become due. A high short-term debt-to-assets ratio suggest that a company is relying heavily on short-term debt and may not have assets to cover its debt obligations. It also indicates poor financial performance as interest expenses are paid out from net profit. Thus, having a negative impact on net profit margin. A low

short-term debt-to-assets ratio indicates that a company has strong liquidity position and is able to meet its short-term obligations. **Mathematically, Short-term debts-to-assets ratio=Short-term debt/Total assets.**

Net Profit Margin

Net profit is a company's profit after all expenses have been deducted and income from other sources added. It provides an understanding as to how well a company's management uses the assets of the company. (Murphy, 2023). An example of net income will be the income of a business after deducting all operating expenses from gross profit while adding incomes from other sources. Net profit margin measures how much net income is generated as a percentage of revenue. (Murphy, 2022). This helps investors know if a company is generating enough profit.

Net profit margin = Net profit/revenue \times 100/ 1

Long-Term Debt to Asset Ratio on Net Profit Margin:

Long-term debt-to-assets ratio measures the percentage of a company's asset that is financed with Long-term debt (Kenton, 2022). This is a solvency ratio that calculates the amount of a company's leverage. A higher long-term debt to assets ratio indicates that a company has a higher level of debt relative to its total assets. This can increase a company's financial risk, as the company will have higher interest and principal payments to make on its debt obligations. As a result, this can lead to lower net profit margin, as a larger portion of the company's earnings will need to be allocated towards servicing its debt This might discourage lenders who loan money to the company.

On the other hand, a lower long-term debt to assets ratio can indicate that a company has lower financial leverage and this can provide more financial stability and flexibility for the company, which can lead to higher net profit margin over the long term. **Mathematically: Long-term debt-to-assets ratio = Long-term debts/total assets.**

Theoretical Review

Trade-Off Theory:

According to Frank and Goyal, (2003) this theory emphasized that a company chooses how much debt finance and how much equity finance to use by balancing the benefits and the costs of using debts. The trade-off theory is a financial theory that attempts to explain the optimal capital structure for a company. The theory suggests that there is an optimal mix of debt and equity financing for a company, which maximizes the value of the firm and minimizes the cost of capital. It assumes that companies face a trade-off between the benefits of debt financing, such as the tax benefits of interest payments, and the costs of debt financing, such as the risk of financial distress and bankruptcy.

According to the trade-off theory, companies should aim to balance the benefits and costs of debt financing in order to maximize shareholder wealth. A company can achieve this balance by analyzing the potential benefits and costs of debt financing and determining the optimal level of debt for its particular circumstances. The theory suggests that there is a range of debt levels that will maximize shareholder wealth, and companies should aim to stay within this range.

Empirical Review

Ofule, Ezeagba, Ahamalu, & Obi (2022), conducted a study on financial leverage and financial performance of quoted industrial goods firms in Nigeria. The study made use of Panel data gotten from 14 companies over 2008 – 2020. Ex-facto research design was employed and inferential statistics in the form of Pearson correlation coefficient, Multicollinearity test and Panel Least Square regression analysis were applied to test the hypotheses of the study. The results of the study revealed that debt to equity ratio and Long-Term Debt ratio have a negative significant relationship on cash value added, while Short Term Debt ratio significantly and positively relates to cash value added of quoted industrial goods firms in Nigeria.

Arumona, Lambe, & Idogho (2021), examined the effects of debt on financial performance of listed consumer goods firms in Nigeria. Panel data along with fixed effects and random effect model were used, Hausman test was also used. The study obtained secondary data from the annual reports of 15 consumer goods firms from 2011-2020. Control variables in the form of firm size and firm age were used. The study revealed that Short Term Debt have a significant negative relationship with net profit.

Alhassan (2021), conducted a study on Capital Structure and Financial Performance of Consumer Goods Companies in Nigeria. The study analyzed the annual report of 15 consumer goods firms quoted in the NSE from 2011 -2020. Fixed effects regression model was employed. Company performance was measured using ROA, ROE, EPS. Capital structure was measured using short-term debt, equity share ratio, long-term debt ratio. The study revealed that long-term debt and equity share have a positive impact on firms' performance.

Olayemi, Olamide and Fakayode (2021), carried a study on the Effect of Capital Structure on Financial Performance of Quoted Manufacturing Companies in Nigeria. The study analyzed 10 companies quoted in the NSE from 2013 – 2019. Panel Data was used to test the hypothesis. TDTAR, LDTAR, SDTAR, TDTER are independent variables used. Dependent variables used are ROA, ROE. The study revealed that LDTAR, TDTER have no significant effect on ROA and ROE respectively. But TDTAR have significant effect on ROA.

Amahalu, Egolum, Nweze and Obi (2018), ascertained the determinants of Capital Structure with a focus on quoted deposit money banks in Nigeria from 2010-2017. The study made use of secondary data obtained fact books, annual reports and account of quoted banks under study. The relevant data were subjected to statistical analysis using Pearson coefficient of correlation, ordinary least square (OLS), variance inflation factor, multicollinearity and heteroskedasticity test. The result of this study empirically revealed that tangibility, bank size and profitability have positive and statistically significant effect on Capital Structure (proxy by leverage) of banks quoted on the floor of Nigerian Stock Exchange at 5% level of significance. The researchers recommend that managers of firms should be cautious when seeking loan advances from the money market. This is more important when considering the appropriate capital mix that optimizes firm value, because a wrong mix may significantly raise their level of operational and financial risks.

Afolabi, Olabisi, Olugboyega and Kajola (2019), determined the effect of leverage on financial performance of Nigerian firms between the years 2007 and 2016. The study adopted ex-post facto research design to retrieve and study data for events which were already in existence.

Inferential statistics adopted econometrics models with a concentration on panel data using regression analysis to achieve the three specific objectives of the study. The surrogates for the independent variable (financial leverage) were Debt Ratio (DR); Debt-Equity Ratio (DER); and Interest Cover Ratio (ICR) while Return on Capital Employed (ROCE), the only dependent variable, was used as financial performance proxy. Three control variables – Firm Size (SZ), Sales Growth (SG) and Growth in Gross Domestic Product (GGDP) were included in the model to capture other firms. The study revealed that Random Effects Generalized Least Squares (REGLS) revealed a positive and significant effect between leverage (DR and DER) and ROCE ($p < 0.05$). However, ICR has a positive but insignificant effect on ROCE ($p > 0.05$).

Anifowose, Soyabo, and Tanimajo (2020), examined the effect of financial leverage on firms' performance, a study of listed Pharmaceutical firms' in Nigeria. Using annual panel data for a period of 16 years, ranges from 2003 to 2018 with the application of econometric techniques. The empirical results show that Debt Equity Ratio (DER) have positive relationship, while Debt Ratio (DR) and Interest Coverage Ratio (ICR) has negative relation with Return on Assets (ROA) and Return on Equity (ROE). This evidence that financial leverage has significant effects on profitability and efficiency of firms' performance, especially quoted Pharmaceutical Companies in Nigeria.

Popoola and Suleiman (2020), studied on Leverage and Financial Performance of Listed Deposit Money Banks in Nigeria. The measurement of financial performance was done using Return on Assets (ROA), while debts (both long-term and short-term) served as the explanatory variables. The main data for analysis was derived from financial statements of the 14 banks in the sample for the ten-year period 2009-2018. Ordinary Least Square (OLS) was also employed. The study revealed that ROA of the banks in the sample was affected significantly by long-term debt ratio and short-term debt ratio, the former negatively and the latter positively.

Musfiqur, Farjana, and Kawsar (2020), investigated the Impact of Financial Leverage on Firm's Profitability using empirical evidence from Listed Textile Firms of Bangladesh. A sample of 22 DSE listed textile firms has been used to conduct the study. Firm profitability is measured by Return on Equity (ROE) and both short term debt and long-term debt are used as the as proxies of financial leverage. The study revealed that there is a significant negative relationship between leverage and firm's profitability using the Pooled OLS method. The result is also consistent with the fixed effect and GMM method.

3.0 METHODOLOGY

In this study, the *ex-post facto* research design is employed as the data gotten from a secondary source cannot be manipulated by the researcher. The population of the study consists of all the twenty (20) listed consumer goods firms in Nigerian Exchange Group factbook, over the 2013 to 2022 fiscal period. The sampling technique employed in this study is the filtering sampling technique. Thus, 16 listed consumer goods firms which are consistently listed on the Nigerian Exchange Group during the 2013-2022 period were used.

This study employed analytical software of Stata version 14 and Microsoft excel for the analysis. The secondary data collected was analyzed using descriptive statistics, correlation, and regression analysis. Correlation analysis was employed to evaluate the association between the variables and to check for multicollinearity. Panel fixed effect analysis technique was employed

to find the cause effect relationship between the independent variables and the dependent variables.

The Shapiro Wilk test for data normality was employed in this study. Thus, where the probabilities > 0.05, it indicates that the data are normal. Conversely, where the probabilities < 0.05, it indicates that the data are not normal. Spearman rank correlation is employed since the data employed does not come from a normal distribution.

Model Specification

This study modified the model of Salim and Yadav (2012) and presents the econometric form of the model as expressed:

$$NPMA_{it} = \beta_0 + \beta_1 LTDA_{it} + \beta_2 STDA_{it} + \beta_3 LTDE_{it} + \beta_4 STDE_{it} + \mu_{it}$$

Where:

- NPMA = Net Profit Margin
- LTDA = Long Term Debt to Asset
- STDA = Short Term Debt to Asset
- LTDE = Long Term Debt to Equity
- STDE = Short Term Debt to Equity
- β_0 = Constant
- $\beta_1 - \beta_4$ = Slope Coefficient
- μ_{it} = Stochastic disturbance
- i = ith company
- t = time period

Table 1 Operationalization of Variables

VARIABLES	MEASUREMENT	SOURCE	APRIORI SIGN
NET PROFIT MARGIN	Computed in percentages as profit after tax divided by revenue	Alvian & Munandar (2022)	
LONG TERM DEBT TO ASSET	Computed as current liabilities divided by total asset	Salim & Yadav (2012)	+
SHORT TERM DEBT TO ASSET	Computed in percentages as non-current liabilities divided by total asset	Yazdanfar & Öhman (2015)	+
LONG TERM DEBT TO EQUITY	Computed in percentages as non-current liabilities divided by total equity	Saeed, Gull & Rasheed (2013).	+
SHORT TERM DEBT TO EQUITY	Computed as current liabilities divided by total equity	Eriki & Osifo (2017)	+

Source: Researcher's Compilation 2023

4.0 Data Presentation, Analysis and Discussion of Results Descriptive Statistics Analysis

The descriptive statistics for both the explanatory and dependent variables of interest are displayed in the Table 1 below. Each variable is examined based on the mean, standard deviation, maximum and minimum.

Table 1 Summary of Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
npma	160	3.0595	14.7612	-92.56	24.91
ldta	160	15.07788	11.35677	.69	78.19
stda	160	44.74181	18.8045	5.14	149.75
ltde	160	.923625	4.173483	-.02	48.67
stde	160	2.431125	12.31979	-2.97	154.23

Source Authors' Computation 2023

Table 1 shows the descriptive statistics of the study. In the case of the dependent variable, the table shows that the mean of financial performance when measured in terms of net profit margin (NPMA) was 3.06 with a standard deviation of 14.76 indicating that on average, the firms were profitable. In the case of the independent variables, the result shows that the mean of long-term debt to asset (LTDA) was 15.08 with a standard deviation of 11.36 while the mean of short-term debt to asset (STDA) was 44.74 with a standard deviation of 18.80. The study also shows that the mean of long-term debt to equity (LTDE) was 0.92 with a standard deviation of 4.17. The mean of short-term debt to equity (STDE) was 2.43. In general, the findings imply that the firms were more levered in relation to equity.

Normality Test

Table 2 Test of Data Normality

Variable	Obs	W	V	z	Prob>z
npma	160	0.62446	46.186	8.718	0.00000
ldta	160	0.87768	15.043	6.167	0.00000
stda	160	0.85688	17.601	6.524	0.00000
ltde	160	0.15262	104.216	10.569	0.00000
stde	160	0.11616	108.699	10.665	0.00000

Source: Authors' Computation

The table above shows the result obtained from the Shapiro-Wilk normality test for the data employed in this study. It is observed that the dependent variable of financial performance when measured in terms of net profit margin ($Z=8.718$; $\text{Prob}>Z=0.00000$) is not normally distributed since the probability of the z-statistic is significant at 1% level. In the case of the independent variables, the table shows that long-term debt to asset ($Z=6.167$; $\text{Prob}>Z=0.00000$), short term debt to asset ($Z=6.524$; $\text{Prob}>Z=0.00000$), long-term debt to equity ($Z=10.569$;

Prob>Z=0.00000), and short-term debt to equity (Z=10.665; Prob>Z=0.00000) are not normally distributed since the probabilities of the z-statistics are significant at 1% level. The interpretation of the data normally test is in line with the studies of Jarque and Bera (1987).

Correlation Analysis

Table 3 Correlation Analysis Result

	npma	ldta	stda	ltde	stde
npma	1.0000				
ldta	0.0292	1.0000			
stda	-0.1672	-0.1546	1.0000		
ltde	-0.0353	0.9329	0.1378	1.0000	
stde	-0.1248	0.1922	0.8608	0.4770	1.0000

Source: Authors' Computation

In the case of the correlation between financial leverage and financial performance, the results obtain from the Spearman rank correlation above shows that there exist a positive association between long term debt to asset (0.0292) and the dependent variable of financial performance when proxied in terms of net profit margin during the period under study. However, the study finds that there is a negative association between short term debt to asset (-0.1672) and the Net profit margin. The result also shows that there is a negative association between the independent variable of long-term debt to equity (-0.0353) and net profit margin. Finally, there is a negative association between the independent variable of short-term debt to equity (-0.1248) and the net profit margin during the period under study. All association are seen to be weak, hence, there is no room to suspect of the presence of multicollinearity among the variables under study.

Regression Analyses

Specifically, to examine the cause-effect relationships between the dependent variables and independent variables of the study, we employ the panel regression technique. However, the study first carried a pool OLS regression analysis and proceed to validate the estimates of the OLS results. The result obtain are presented in table 4.

Table 4

	Regression Result			
	NPMA Model (Pool OLS)	NPMA Model (FIXED Effect)	NPMA Model (RANDOM Effect)	NPMA Model (LSDV)
CONS.	17.010 {0.000} ***	21.342 {0.000} ***	20.449 {0.000} ***	4.153 {0.000} ***
LTDA	-0.056 {0.645}	-0.216 {0.101}	-0.181 {0.141}	-0.216 {0.101}
STDA	-0.284 {0.000} ***	-0.332 {0.000} ***	-0.323 {0.000} ***	-0.332 {0.000} ***
LTDE	-3.845 {0.002} **	-2.884 {0.009}	-3.074 {0.004} **	-2.884 {0.009}
STDE	1.300 {0.001} **	1.028 {0.005} **	1.082 {0.002} **	1.028 {0.005} **
F-stat/Wald Stat	9.24 {0.0000} ***	12.59 {0.0000} ***	51.26 {0.0000} ***	7.19 {0.0000} ***
R- Squared	0.1925	0.2645	0.2642	0.4940
Hetero. Test	45.29 {0.0000} ***			

PRESENCE OF FE/RE	YES {5.56 (0.0000)}	YES {62.50 (0.0000)}
Hausman Test	21.07 (0.0000) ***	

Note: (1) bracket {} are p-values; (2) **, *, implies statistical significance at 5% and 1%**

From the table we observed from the pool OLS regression that the R-squared value of 0.1925 shows that about 19% of the systematic variations in financial performance measured in terms of net profit margin of the pooled consumer goods firms in Nigeria was jointly explained by the independent variables in the model. Furthermore, the F-statistic value of 9.24 and the associated p-value of 0.0000 shows that the specified model is statistically significant at 1% level. This means that the regression model is valid and can be used for statistical inference. However, we conduct some post regression test to further ascertain the validity of the pool OLS regression by conducting the test for heteroscedasticity. The result obtained from the regression of the model as shown in the table above reveals that the probability value of the heteroscedasticity test is significant at 1% level {45.29 [0.0000]}. This result indicates that the assumption of homoscedasticity has been violated. However, the study re-specifies the model to control for this violation by employing the fixed effect panel regression results in drawing the conclusion and recommendations. Also, the Least Square Dummy Variable Regression was adopted to control for the unobserved heterogeneity in the fixed effect regression.

Test of Hypotheses

In this study, we test our hypotheses using the result of the least square dummy variable regression in table 4

Hypothesis 1: Long term debt to asset has no significant effect on the financial performance of listed consumer goods firms in Nigeria.

The results obtained from the least square dummy variable (LSDV) regression model revealed that long term debt to asset [coef. = -0.216 (0.101)] has an insignificant effect on net profit margin of listed consumer goods firms in Nigeria. Specifically, the study fails to reject the null hypothesis that long term debt to asset has no significant effect on the financial performance of listed consumer goods firms in Nigeria during the period under study.

Hypothesis 2: Short term debt to asset has no significant effect on the financial performance of listed consumer goods firms in Nigeria.

The results obtained from the least square dummy variable (LSDV) regression model revealed that short term debt to asset [coef. = -0.332 (0.000)] has a significant negative effect on net profit margin of listed consumer goods firms in Nigeria. The result implies that short term debt to asset significantly decreases net profit margin measure of financial performance during the period under study. Specifically, the study rejects the null hypothesis that short term debt to asset has no significant effect on the financial performance of listed consumer goods firms in Nigeria during the period under study.

Hypothesis 3: Long term debt to equity has no significant effect on the financial performance of listed consumer goods firms in Nigeria.

The results obtained from the least square dummy variable (LSDV) regression model revealed that long term debt to equity [coef. = -2.884 (0.009)] has a significant negative effect on net profit margin of listed consumer goods firms in Nigeria. The result implies that long term debt to equity significantly decreases net profit margin during the period under study. Specifically, the study rejects the null hypothesis that long term debt to equity has no significant effect on the financial performance of listed consumer goods firms in Nigeria during the period under study.

Hypothesis 4: Short term debt to equity has no significant effect on the financial performance of listed consumer goods firms in Nigeria.

The results obtained from the least square dummy variable (LSDV) regression model revealed that short term debt to equity [coef. = 1.028 (0.005)] has a significant positive effect on net profit margin of listed consumer goods firms in Nigeria. The result implies that short term debt to equity significantly increases net profit margin during the period under study. Specifically, the study rejects the null hypothesis that short term debt to equity has no significant effect on the financial performance of listed consumer goods firms in Nigeria during the period under study.

Discussion of Findings

In this study, it is documented that long term debt to asset has an insignificant effect on net profit margin of listed manufacturing firms in Nigeria. This is in line with the findings of Olayemi, Olamide and Fakayode (2021), who revealed that long term debt to asset has no significant effect on the financial performance of the firm but negates the findings of Ogiriki, Werigbelegha, and Avery (2018). This study also provides evidence that short term debt to asset has a significant effect on net profit margin measure of financial performance of listed manufacturing firms in Nigeria. This result implies that short term debt to asset significantly decreases net profit margin, which is in line with the findings of Arumona, Lambe, & Idogho (2017), Pinto, Hawaldar, Quadras and Joseph (2021). However, this outcome negates that of Ahmadu (2017), who revealed that short-term debt to asset ratio, has no significant effect on financial performance. Further, the result indicates that long term debt to equity has a significant negative effect on net profit margin during the period under study. The finding is in line with those of Ogiriki, Werigbelegha, and Avery (2018), Musfiqur, Farjana, and Kawsar (2020), whose outcome suggest a negative impact on profitability. Particularly, the empirical result of short-term debt to equity has a significant positive effect on net profit margin measure of financial performance of listed manufacturing firms in Nigeria. This outcome agrees with those of Popoola and Suleiman (2020) but contradict the findings of Musfiqur, Farjana, and Kawsar (2020), who found insignificant relationship between the financial leverage and the financial performance.

5.0 Conclusion and Recommendations

The study investigates firm financial leverage on financial performance in the disruptive era: Evidence from listed consumer goods firms in Nigeria. The motive of every firm is to make profit, maximize owner's wealth, and to achieve this motive they need to source for fund to finance their operations and activities. However, based on the findings of the study, it is

concluded that short-term debt to asset, and long term to equity significantly decreases financial performance of listed consumer goods firms in Nigeria. The study concluded that short-term debt to equity significantly improves net profit margin firms. This infers that management of the consumer goods firms must choose this best financing sources to reach the optimal capital structure that would enable them to achieve positive returns. The study recommends improved and effective debt management practices to minimize the negative impact of short-term debt on profitability. This can be done by closely monitoring and managing debt levels, negotiating favorable interest rates, and optimizing the timing and structure of debt repayments.

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