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EFFECT OF FINANCIAL LEVERAGE ON ORGANIZATIONAL PERFORMANCE: A CASE STUDY OF NIGERIAN BOTTLING COMPANY PLC

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Abstract

This study examined the Impact of Financial Leverage on Performance of Manufacturing Firms with particular reference to Brewery industries in Nigeria. Finance or money suppliers exert different controls over those firms they are providing funds for Guided by three research objectives, questions and hypothesis while secondary data was collection through published annual reports of the sample firms for the period of 2009- 2018. Descriptive statistic which explains the characteristics of research variables was utilized in the analysis with mean, median, standard deviation and other frequency distribution including maximum and minimum values of the time series data. Multiple regression analysis was used for the analysis because there are more than one independent variables affecting the dependent variables of the study. T-Test to measure the individual significance of the estimated independent variables, and F-Test to measure the overall significance. It was discovered that (1) debt- equity ratio has significant effect on return on investment (2) Capital employed also has significant effect on the return on investment and (3) Total debt significantly influenced the return on investment of Nigeria bottling Plc. The study recommends that Brewery firms in Nigeria should employ more of debt than equity to enhance returns to the shareholders. They should explore other forms of financing such as trade credit, trade discounts, and avoid prompt payment of short-term liabilities. This will make funds available for the day-to-day running of the business. Lastly Brewery firms in Nigeria should employ more of long-term capital in financing activities for enhanced earnings.

Keywords: Financial Leverage, Profitability, Financial Performance, Organization

1. Introduction

The mix of a company's money-related liabilities is referred to as its financial leverage. Because financial capital is a speculative but essential asset for all organizations, money lenders can exert control over businesses. Debts and equity are the two major types of obligations, with debt holders and equity holders communicating with the two types of financial professionals in the company. Each of these is associated with varying degrees of danger, benefit, and control. Debt holders have less influence, but they get a guaranteed rate of return and are protected by legally binding promises for their speculating. Equity investors are the main petitioners, as they face the majority of the risk and, as a result, have a higher influence over decisions. Questions concerning the selection of an appropriate financing means (debts versus equity) have become increasingly important in management research. These issues, which are generally examined in the order of money, have become more relevant in recent years, with researchers looking at links to technique and major results (Acemoglue, 2008).

The financial management parts of a company, including the capital structure choice, manage the sources and uses of funds. When raising funding for resources, companies engage in transactions with money providers (whether debt or equity holders). These providers have the right to share in the profits generated by the benefits. The debt-to-equity ratio of a company determines how these profits will be distributed between debt and equity holders. As it were, if companies are set up to increase equity investors' wealth, the amount of revenue distributed to debt holders becomes important. The various types of funding, on the other hand, are associated with varying degrees of expenses. These cost comparisons, as well as the estimation of such resources, should be included in a calculation of a company's net benefit (Adebiyi, et al., 2004).

The capital structure of a company is inextricably linked to its performance (Tian & Zeitun, 2007). Efficiency, productivity, development, and even client satisfaction are all variables that can be used to assess a company's performance. These measurements are linked to one another. Financial measuring is one of the tools that can be used to show financial qualities, flaws, possibilities, and treats. Return on investment (ROI), leftover pay, also known as residual equity (RI), earning per share (EPS), dividend yield, return on assets (ROA), increase in sales/return on equity (ROE), and so on are examples of these metrics (Barbosa & Louri, 2012). Performance is measured by three proxies in particular: return on equity or return on equity (ROE), return on resources/return on assets (ROA), and rate of profitability/return on investment, with the end goal of this investigation (ROI).

It's also important to remember that, when evaluating a corporation's success, the individual wealth of a firm can influence the level of risk that investors and managers are willing to accept, as well as the resources available to support the business.

Statement of the Problem

In reality, determining a company's appropriate financial structure is difficult. Financial executives have difficulty deciding on the best capital structure. A company must provide various protections in an incalculable mixture to run over certain mixes that can increase its overall worth, implying an optimal capital structure. In Nigeria, financial specialists and partners do not consider the impact of capital structure in estimating their organizations' performance because they may believe that capital structure attribution is unrelated to or does not add to a firm's performance, but they are unaware that it plays a critical role in a firm's performance. As a result, there is a need for modern integrative study to determine the arguments. Due to the related risk of raising capital, the standard of increasing capital in Nigeria has become more difficult to achieve, and as a result, a firm must issue various securities in infinite combinations in order to find certain combinations that can maximize it over all equity. As a result of this leverage, corporate finance decisions in Nigeria's listed industrial enterprises have become a global issue.

Objective of the Study

i. To examine the effect of debt equity ratio on the return on investment of Nigeria bottling Plc.
ii. To evaluate the effect of capital employed on the return on investment of Nigeria bottling Plc.
iii. To ascertain the effect of total debt on the return on investment of Nigeria bottling Plc.

Research Hypotheses

H_{01}: Debt equity ratio does not have any significant effect on the return on investment of Nigeria bottling Plc.
H_{02}: Capital employed does not affect the return on investment of Nigeria bottling Plc.
H_{03}: Total debt does not have any effect on the return on investment of Nigeria bottling Plc.

2. Literature Review

Financial Leverage: The combination of a company's financial liabilities is referred to as its capital structure. Suppliers of finance are able to exert control over enterprises since financial capital is an uncertain but crucial resource for all firms. Internal equity or external debt is the two options for funding an organization's assets. The capital structure of a company refers to how it finances its assets through a combination of equity and debt (Tsai et al,2010). According to Mc Menamin, (2009) and Ross; et al, (2009), there are numerous types of equity and debt (2012). Common stock, preferred stock, and retained earnings (untaxed reserves), as well as bank loans, bonds, accounts payable, and lines of credit, are examples of these. According to Song (2012), capital structure refers to a company's mix of different types of instruments (long-term debt, common stock) that are issued to finance its assets. Chou (2007) defines capital structure as a company's combination of debt and equity financing. According to Wikipedia (2010), a corporation's capital structure refers to how it finances itself through a combination of equity, debt, and hybrid securities. From all of the preceding definitions, it is clear that capital structure refers to the structure of a company's obligation. As a result, the capital structure theory is critical to the firm's safety and growth, as well as the loan holders' protection for a long-term economy. How to plan financing decisions utilizing a certain method or mix of funds to maintain a proper capital structure is a critical challenge for finance managers if their industries are ever to play a significant role in economic development.

Leverage is defined as the sensitivity of equity ownership's equity to changes in the firm's underlying equity. Leverage ratios are typically independent variables in empirical studies (sometimes as part of a hypothesis, sometimes as a control). In the empirical capital structure literature, leverage ratios are also a dependent variable. This literature aims to explain differences in corporate leverage, both in terms of the cross section of capital structure (i.e. why some firms have high leverage) and in terms of time series (i.e. why some firms have high leverage) (how capital structures evolve). The capital structure of a company refers to its financial framework, which includes the debt and equity used to fund it.

Return on Investment (ROI): The rate of profitability (ROI) is a presenting metric used to evaluate a venture's efficiency or compare the effectiveness of various investments. Return on capital invested is an attempt to directly quantify the measure of return for a certain speculation in comparison to the venture's expense. The benefit (or return) of a speculation is divided by the venture's expense to determine ROI.

Debt Equity Ratio: According to Zakari (2008), the debt-equity proportion is a debt ratio used to quantify an organization's financial influence. It is calculated by separating an organization's total liabilities from its investor's correspondence. The debt-equity proportion demonstrates how much debt an organization is using to back its advantages in comparison to the measure of significant value to shareholders' equity. The formula for calculating the D/Equity ratio is as follows:Debt – Equity Ratio = Total Liabilities

Capital Employed: The aggregate total of capital used to secure advantages by a firm or job is known as capital employed/utilized, or assets employed. It is the calculation of the significant number of benefits used in a business or specialist unit, and it can be calculated by adding fixed advantages for working capital or removing current liabilities from total resources. You make an investment in this way by utilizing capital. The amount of capital utilized can show how a company invests its funds. However, it is a widely used term that is also difficult to define because it is used in so many different contexts. For the most part, all definitions allude to the capital speculation that is required for a firm to function. Stocks and long-term obligations are included in capital speculations.

Organizational Performance: Organizational performance comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives). Organizational performance also the success or fulfillment of organization at end of program or projects as it is intended. According to

Richard et al. (2009) organizational performance encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment etc.); (b) product market performance (sales, market share etc.); and (c) shareholder return (total shareholder return, economic value added, etc.). The term organizational effectiveness is broader. Specialists in many fields are concerned with organizational performance including strategic planners, operations, finance, legal, and organizational development.

2.1 Theoretical Framework

The modern portfolio theory (MPT) is a practical method for selecting investments in order to maximize their overall returns within an acceptable level of risk. American economist Harry Markowitz pioneered this theory in his paper "Portfolio Selection," which was published in the Journal of Finance in 1952.1 He was later awarded a Nobel Prize for his work on modern portfolio theory. A key component of the MPT theory is diversification. Most investments are either high risk and high return or low risk and low return. Markowitz argued that investors could achieve their best results by choosing an optimal mix of the two based on an assessment of their individual tolerance to risk.

The modern portfolio theory argues that any given investment's risk and return characteristics should not be viewed alone but should be evaluated by how it affects the overall portfolio's risk and return. That is, an investor can construct a portfolio of multiple assets that will result in greater returns without a higher level of risk. As an alternative, starting with a desired level of expected return, the investor can construct a portfolio with the lowest possible risk that is capable of producing that return. Based on statistical measures such as variance and correlation, a single investment's performance is less important than how it impacts the entire portfolio.

Acceptable Risk

The MPT assumes that investors are risk-averse, meaning they prefer a less risky portfolio to a riskier one for a given level of return. As a practical matter, risk aversion implies that most people should invest in multiple asset classes. The expected return of the portfolio is calculated as a weighted sum of the returns of the individual assets. If a portfolio contained four equally weighted assets with expected returns of 4%, 6%, 10%, and 14%, the portfolio's expected return would be:

(4% x 25%) + (6% x 25%) + (10% x 25%) + (14% x 25%) = 8.5%

The portfolio's risk is a function of the variances of each asset and the correlations of each pair of assets. To calculate the risk of a four-asset portfolio, an investor needs each of the four assets' variances and six correlation values, since there are six possible two-asset combinations with four assets. Because of the asset correlations, the total portfolio risk, or standard deviation, is lower than what would be calculated by a weighted sum.

Benefits of the MPT

The MPT is a useful tool for investors who are trying to build diversified portfolios. In fact, the growth of exchange-traded funds (ETFs) made the MPT more relevant by giving investors easier access to a broader range of asset classes. For example, stock investors can reduce risk by putting a portion of their portfolios in government bond ETFs. The variance of the portfolio will be significantly lower because government bonds have a negative correlation with stocks. Adding a small investment in Treasuries to a stock portfolio will not have a large impact on expected returns because of this loss-reducing effect. Similarly, the MPT can be used to reduce the volatility of a U.S. Treasury portfolio by putting

10% in a small –cap-value index fund or ETF. Although small-cap value stocks are far riskier than Treasuries on their own, they often do well during periods of high inflation when bonds do poorly. As a result, the portfolio's overall volatility is lower than it would be if it consisted entirely of government bonds. Moreover, the expected returns are higher.

The modern portfolio theory allows investors to construct more efficient portfolios. Every possible combination of assets can be plotted on a graph, with the portfolio's risk on the X-axis and the expected return on the Y-axis. This plot reveals the most desirable combinations for a portfolio. For example, suppose Portfolio A has an expected return of 8.5% and a standard deviation of 8%. Assume that Portfolio B has an expected return of 8.5% and a standard deviation of 9.5%. Portfolio A would be deemed more efficient because it has the same expected return but lower risk. It is possible to draw an upward sloping curve to connect all of the most efficient portfolios. This curve is called the efficient frontier. Investing in a portfolio underneath the curve is not desirable because it does not maximize returns for a given level of risk.

2.2 Empirical Review

Sylvester (2020) examined the Impact of Financial Leverage on Performance of Manufacturing Firms with particular reference to Brewery industries in Nigeria. Finance or money suppliers exert different controls over those firms they are providing funds for Guided by three research objectives, questions and hypothesis while secondary data was collection through published annual reports of the sample firms for the period of 2009 to 2018. Descriptive statistic which explains the characteristics of research variables was utilized in the analysis with mean, median, standard deviation and other frequency distribution including maximum and minimum values of the time series data. Multiple regression analysis was used for the analysis because there are more than one independent variables affecting the dependent variables of the study. T-Test to measure the individual significance of the estimated independent variables, and F-Test to measure the overall significance. It was discovered that (1) debt-equity ratio has significant effect on return on investment (2) Capital employed also has significant effect on the return on investment and (3) Total debt significantly influenced the return on investment of Nigeria bottling Plc. It was recommended that Brewery firms in Nigeria should employ more of debt than equity to enhance returns to the shareholders. They should explore other forms of financing such as trade credit, trade discounts, and avoid prompt payment of short-term liabilities. This will make funds available for the day-today running of the business. Lastly Brewery firms in Nigeria should employ more of long-term capital in financing activities for enhanced earnings.

Syed (2015) investigate the impact of financial leverage on corporate financial performance of Pakistan's textile sector from 1999-2012 using panel data. The leverage-performance relationship is examined with a special focus on the Global Financial Crisis of 2007-2008. Both accounting-based (Return on Assets - ROA) and market-based (Tobin's Q) measures of corporate financial performance are used. Regression analysis is performed with and without inclusion of financial crisis dummy. Total Debt to Total Assets (TDTA), Long Term Debt to Total Assets (LDTA), Short Term Debt to Total Assets (SDTA) and Debt to Equity (DE) ratios are used as proxies for financial leverage whereas firm's size and firm's efficiency are used as control variables. The results indicate that financial leverage has a negative impact on corporate performance when measured with ROA. Whereas in case of Tobin's Q, SDTA coefficient is positive. The study concluded that since cost of borrowing is high in Pakistan and debt capital markets are less developed, firms are forced to resort to banks as their source of debt finance and thus have to repay huge amount of principal and interest which has a heavy toll on their financial health. In addition to this, financial crisis was found to have a negative impact on corporate performance and also affect the leverage-performance relationship.

Umer and Muhammad (2018) identify the relationship between financial leverage and the performance of Textile Composite Companies of Pakistan. Pakistan Textile Composite Companies which are listed in PSX (100-index) are selected.5-year data is collected from 2011-2015 and top 16 companies are selected as a sample. Using descriptive statistics, correlation analysis and regression model to identify the results. Results show that financial leverage has negative and significant effect on firm ROE and financial leverage has positive and significant effect on firm ROA. Further study indicates that the high interest rate and more amount of debt decreases the value of equity and has negative impact on firm performance. On the other hand, the amount of debt has positive impact on firm ROA. Results show that financial leverage has positive impact on firm performance if the amount of debts do not exceed from the amount of equity.

Chen (2020) Risks and returns are two key considerations while firms make decision. Since Chinese economic environment is becoming more open, the diversity of finance is promoted; therefore, the studies on the impact of capital structure on firm operation and corresponding solutions are significant. There have been several researches focusing on this topic to find out the relationship between financial leverage and firm performance. This paper uses a sample of

Chinese listed companies covering the period 2010-2019, to study the impact of financial leverage on firm performance, measured by return on assets (ROA). By using OLS and 2SLS methods to take linear regression, this research shows that the relationship between financial leverage and firm performance is significantly negative, while operating leverage positively moderates this relationship. In addition, by further researches, this study shows that the moderating role of operating leverage could be insignificant in real estate industry. This research is of certain significance for enterprises' financing decision-making and risk management. It suggests that high debts are harmful to a firm's performance, since it could introduce extra financial risks and agency costs; nonetheless, control the selling, general and administrative expense could be a good way to solve this problem. Based on all the researches above, some suggestions come up: Firstly, firms should maintain a proper capital structure. Moreover, management could adjust operating leverage to release the negative consequence of debt. Finally, real estate enterprises could afford higher financial leverage than other enterprises. At the end of this paper, the limitations of this paper are listed, and suggestions for future researches are put forward

Gonzalez (2012) discussed in his results that the financial structure can influence the relationship between leverage and firm operating performance in an organization. Moreover, it is very important to a company to be listed in the market, which as this makes it easier for them to acquire debt financing. Furthermore, it is much vulnerable for all listed firms to consider the factors that influence them when they decide the level of debt. Weill (2007) discussed institutional factors that may influence the relationship between leverage and performance; one such factor is a firm's access to bank credit. This is because firms facing difficulties in accessing credit. It defines access to banking credit as the ratio between the claims of deposit banks in the private sector and the gross domestic production. Eventually the access to bank credit, and the powers of the legal system will also influence the relationship between leverage and performance. Moreover, the principal amount and interest payments on a business loan, which are classified as business expenses, thus, can be deducted from company income taxes. With the payback of the debt obtained, organizations have to pay interest, sometimes at a high interest rate. With this payment of high interest and debt, organizations may face financial distress due to higher expenses. As a result, if the organizations are poor in their business operations, they may face higher financial distress.

3. Methodology

Because the study relied exclusively on secondary sources of data gathering in establishing the influence of financial leverage on corporate performance in the manufacturing sector, with special reference to Nigeria bottling Plc. Enugu, an ex-post facto design was used.

3.1 Population and Sampling Techniques

The population comprises of 30 breweries that have been functioning in Nigeria for ten years (2009-2018). 3.3 Data gathering the information was gathered from Nigerian Brewery plc's annual reports and accounts.

3.2 Data Analysis

The statistical tool for analysis in this study is descriptive statistic which explains the characteristics of research variables. It reveals the mean, median, standard deviation and other frequency distribution indices including maximum and minimum equity of the time series data. We have multiple regression analysis when there are more than one independent variables affecting the dependent variable. Therefore, we will use Adj R2 and Student T-Test to measure the individual significance of the estimated independent variables, and F-Test to measure the overall significance. The coefficient is used to measure the individual contribution of the variables to variation in the dependent variable. Durbin Watson (DW) Statistics tests for auto correlation in the regression. The decision rule is to reject the null hypothesis, when p-equity is less than 0.05 percent level of significance, otherwise, do not reject.

Reject the null hypothesis if the t-statistic is greater than 2 and the p-equity is less than 0.05. From computed F-equity to test the Acceptability of the model from statistical perspective, the decision criterion is stated below as follows:

Fcalculated>FtableequityReject the null hypotheses

Ftabulated>Fcalculate Accept the null hypotheses

4. Data Presentation and Discussion

The main objective of this study is to examine the impact of financial leverage on company's performance in the manufacturing sector with particular reference to Nigeria bottling Plc Enugu. To achieve this objective secondary data were collected from the annual report and account of Nigeria bottling Plc. For purpose of analysis. The data collected are presented in tables 1

Table 1: Raw Data used for Analysis

Period	DER	CE	TDBT	ROI
2008	3,475,695,000	3,261,104,000	300,855,000	160,115,000
2009	3,813,530,000	2,596,288,000	502,304,000	326,987,000
2010	5,113,459,000	2,944,087,000	674,881,000	523,088,000
2011	6,856,930,000	3,019,289,000	561,938,000	506,033,000
2012	8,779,721,000	2,069,044,000	-263,707,000	1,009,582,000
2013	9,550,680,000	4,586,968,000	-522,548,000	1,739,695,000
2014	8,408,000,000	3,159,000,000	-1,591,000,000	448,000
2015	9,965,000,000	1,966,000,000	-1,044,000,000	836,000
2016	6,965,000,000	3,339,000,000	-34,000,000	57,000,000

2017	7,036,000,000	3,093,000,000	-176,000,000	60,000,000
2018	7,733,000,000	3,188,000,000	60,000,000	231,000,000

Source: Author's Calculations with Data from Annual report of Nigeria Bottling Plc.

Table 2: Logged Data used for Analysis

Period	DER	FCE	TDBT	ROI
2009	1.299478	1.816725	1.663249	1.98849
2010	2.141525	1.174318	1.972466	1.193981
2011	2.212247	4.138284	2.873237	1.471435
2012	1.593742	1.776123	1.851793	1.613374
2013	2.164855	1.600035	1.694964	2.051589
2014	2.076489	2.476316	2.36015	2.139271
2015	1.826164	-0.81721	0.208966	2.519627
2016	2.108865	2.400126	2.559455	1.314848
2017	1.619557	1.628705	0.569586	2.264664
2018	1.757118	3.41398	3.469146	1.922113

Source: Author's Eviews 9.0 Output, 2019

Table 3: Descriptive Statistics

	ROI	FCE	DER	TDBT
Mean	348328.4	19.52659	10.74724	16.80277
Median	464261.5	17.33424	12.71384	1.136355
Maximum	589876.5	119.8069	20.17506	106.8447
Minimum	41884.40	-46.67180	-1.951650	-55.32130
Std. Dev.	231518.2	42.29755	7.775986	59.59596
Skewness	-0.326160	1.053234	-0.479160	0.375474
Kurtosis	1.262179	4.698631	1.911676	1.768527
Jarque-Bera	1.435643	3.051064	0.876178	0.866853
Probability	0.487814	0.217505	0.645268	0.648284
Sum	3483284.	195.2659	107.4724	168.0277
Sum Sq. Dev.	4.82E+11	16101.75	544.1937	31965.11
Observations	10	10	10	10

The descriptive statistics in the table 3 presents the statistical characteristics of all the observations. These include measures of central tendency the mean and median. Dispersions in the series are also indicated using the standard deviation. The results show the mean to stand at N348328.4, N19.52659, N10.74724 and N16.80277 with a standard deviation of N231518.2, N42.29755, N7.775986 and N59.59596 for Return on investment (ROI), Capital employed (FCE), Debt equity ratio (DER) and Total debt (TDBT) respectively.

In addition to statistical description of the panel above, the descriptive statistics also test or checks for the normality of the observed variables. In other words, the test helps us to ascertain if the variables are normally distributed. To reject the null hypothesis that the data are not normally distributed, the JB (JarqueBera) statistics must be significant at a critical equity of 0.05 (Gujarati and Porter, 2009). The normality test results therefore reveal that there is strong evidence that the panel variables and dataset are normally distributed as the probability of JB-statistic for each of the variable is < the critical equity of 0.05. Hence, the null hypothesis (H0) is rejected in favour of the alternative (H1) that the residuals of the distribution of the model are normally distributed.

Test of Hypotheses

The Least Squares was used in the test of hypotheses. One of the major benefits from using panel data as compared to cross-section data on individuals is that it enables us to control for individual heterogeneity. Not controlling for these unobserved individual specific effects leads to bias in the resulting estimates. In arriving at a decision, the following steps were taken:

i. The hypotheses were restated in null and alternate forms,
ii. The decision criterion or criteria were stated,
iii. The presentation of the Eview result
iv. The null hypothesis is rejected or accepted based on the decision criterion or criteria.

Test of Hypothesis One

Step One: Restatement of Hypothesis in Null and Alternate Form

Ho: Debt equity ratio does not have any significant effect on the return on investment of Nigeria bottling Plc.
H1: Debt equity ratio has significant effect on the return on investment of Nigeria bottling Plc.

Step two: Decision Rule/criteria

Accept H0 if the t-statistics < 2, probability of t-statistics > 0.05; otherwise, reject H0 and accept H1. Step Three: Presentation of Panel Regression Result

Table 4: Panel Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER	13827.76	9322.373	3.483288	0.0038
C	496938.7	121521.2	4.089317	0.0035
R-squared	0.815697	Mean dependent var		348328.4
Adjusted R-squared	0.717659	S.D. dependent var		231518.2
S.E. of regression	217471.9	Akaike info criterion		27.59438

Sum squared resid	3.78E+11	Schwarz criterion	27.65490
Log likelihood	-135.9719	Hannan-Quinn criter.	27.52800
F-statistic	2.200144	Durbin-Watson stat	0.936858
Prob(F-statistic)	4.176287		

Source: Author's Eviews 9.0 Output, 2019

From the model above, R^2 of 0.815697 shows that 82% variation on return on investment was explained by debt equity ratio. The results further indicates that the overall regression is significant as explained by the prob (F-statistics) of 4.176287 is significant at 0.05 or 5%. This implies that the entire model is significant. The Durbin Watson statistics (DW) of above 2 shows no trace of autocorrelation in the model.

The table 4 shows that the coefficient of 13827.76 is positive, the t-statistics of 3.483288> 2 and the probability equity of 0.0.0110< 0.05 and significant at 5% critical equity. Thus, the study accepts the alternative hypothesis which states that debt equity ratio has significant effect on the return on investment of Nigeria bottling Plc.

Test of Hypothesis Two

Step One: Restatement of Hypothesis in Null and Alternate Form

Ho: Capital employed does not affect the return on investment of Nigeria bottling Plc.

H1: Capital employed affects the return on investment of Nigeria bottling Plc.

Step two: Decision Rule/criteria

Accept H0 if the t-statistics < 2, probability of t-statistics > 0.05; otherwise, reject H0 and accept

H1.

Step Three: Presentation of Panel

Table 5: Panel Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER	13827.76	9322.373	3.483288	0.0038
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Log likelihood	-135.9719	Hannan-Quinn criter.		27.52800
F-statistic	2.200144	Durbin-Watson stat		0.936858

Prob(F-statistic)	4.176287		

Source: Author's Eviews 9.0 Output, 2019

From the model above, R^2 of 0.784226 shows that 78% variation on Return on investment was explained by changes in Capital employed. The adjusted R2 of 0.697623 which considers more number of repressors explains that 70% variations in the dependent variable (ROI) are caused by capital employed and lagged equity of return on investment. The results further indicate that the overall regression is significant as explained by the prob(F-statistics) of 0.848670 which is significant at 0.05 or 5%. This implies that the entire model is significant. The Durbin Watson statistics (DW) of above 2 shows no trace of autocorrelation in the model.

Table 5 shows that the coefficient of 380.4900 is positive, the t-statistics of 4.197093 > 2 and the probability equity of 0.0029 < 0.05 and significant at 5% critical equity. Thus, the study rejects the null hypothesis and accepts the alternate that capital employed affects the return on investment of Nigeria bottling Plc.

Test of Hypothesis Three

Step One: Restatement of Hypothesis in
Null and Alternate Form
Ho: Total debt does not have any effect on the return on investment of Nigeria bottling Plc.
Step two: Decision Rule/criteria
Accept H0 if the t-statistics < 2, probability of tstatistics> 0.05; otherwise, reject H0 and accept H1.
Step Three: Presentation of Panel

Table 6: Panel Regression Results

Dependent Variable: ROI				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
TDBT	1.730104	1372.120	6.126090	0.0011
C	345421.3	80930.02	4.268148	0.0027
R-squared	0.731983	Mean dependent	var	348328.4
Adjusted R-squared	0.622769	S.D. dependent var		231518.2
S.E. of regression	245318.5	Akaike info criterion		27.83536
Sum squared resid	14.81E+1	Schwarz criterion		27.89588
Log likelihood	-137.1768	Hannan-Quinn criter.		27.76897
F-statistic	0.015899	Durbin-Watson stat		0.968674
Prob(F-statistic)	14.902772			

Source: Author's Eviews 9.0 Output, 2019

From the model above, R^2 of 0.731983 shows that 73% variation on return on investment was explained by total debt. The results further indicate that the overall regression is significant as explained by the prob (F statistics) of 14.902772

is significant at 0.05 or 5%. This implies that the entire model is significant. The Durbin Watson statistics (DW) of above 2 shows no trace of autocorrelation in the model.

The table shows that the coefficient of 1.730104 positive, the t-statistics of 6.126090 > 2 and the probability equity of 0.0011 < 0.05 and significant at 5% critical equity. Thus, the study accepts the alternative hypothesis that total debt significantly affects the return on investment of Nigeria bottling Plc.

5. Summary, Conclusions and Recommendations

5.1 Findings

At the end of this study on the impact of financial leverage on company's performance in the manufacturing sector with particular reference to Nigeria bottling Plc Enugu. The study observed the following;

i. Debt equity ratio has significant effect on return on investment of Nigeria bottling Plc.
ii. It was also observed that capital employed has significant effect on the return on investment of Nigeria bottling Plc.
iii. The study further shows that total debt significantly influence the return on investment of Nigeria bottling Plc.

5.2 Conclusion

One of the fundamental goals of a company's management is to increase the wealth of its owners or investors. This goal might be achieved by making smart financial decisions in terms of an optimal capital structure that would reduce the company's capital expense.

A company's capital structure is made up of a mix of debt, preferred stock, and equity; this is referred to as the organization's long-term financing mix. Any firm's capital structure must be chosen carefully in order to increase return to different partners and improve the firm's ability to work in a specific domain. Unscrupulous capital allocations in business frequently result in difficulties obtaining assets to support the organization's future obligations, and can even result in the failure or dissolution of the company.

This is due to the fact that an ill-advised capital mix can also lead to a procuring per share issue. Aside from concerns arising from ill-advised capital structure arrangements, there are other issue areas that affect both capital structure and profitability rate.

Several breweries that had previously made significant contributions to Nigeria's economy are either closing or reducing their operations.

The cause of this might be traced back to a lack of capital structure. As a result, the most pressing issue confronting directors today is how to choose the right mix of debt and equity to achieve an optimum capital structure that limits the organization's capital expense and improves the return to shareholders. This investigation looked into the impact of monetary influences on an organization's exhibition in the assembling division, with a focus on Nigeria Packaging Plc in Enugu. Discoveries reveal that the debt-to-equity ratio has a significant impact on Nigeria Packaging Plc's profitability rate. It was also shown that the capital used has a significant impact on the arrival on Nigeria Packing Plc's speculation. The analysis also reveals that total debt has a significant impact on Nigeria Packaging Plc's arrival on speculation.

5.3 Recommendations

i. The debt/equity ratio compares the amount of debt a company uses to back its assets to the measure of substantial value of shareholders' equity. Given that the debt-to-equity ratio has a favorable and significant impact on brewery

firms' returns on investment in Nigeria, brewery firms in Nigeria should use more debt than equity to increase returns to the business's owners, the shareholders.

ii. The amount of capital used has a significant and favorable impact on the return on investment (ROI) of Nigerian brewery companies. This means that a rise in debt, along with an increase in interest payments, reduces earnings payable to shareholders. Breweries should look into other financing options, such as trade credit and trade discounts, and avoid paying short-term bills on time.

iii. Because overall debt has a substantial impact on brewery enterprises' returns on investment in Nigeria, this indicates that the firms still have room to invest in long-term capital. As a result, breweries in Nigeria should use more long-term capital to fund their operations in order to increase shareholder returns.

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