AN EMPIRICAL ANALYSIS OF FIRM GROWTH AND FINANCIAL PERFORMANCE OF SELECTED FIRMS IN NIGERIA

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ABSTRACT: *This study empirically investigated on firm indicators and financial performance of food and beverage industry in Nigeria covering the period 2010-2019. In the course of the study, four companies namely Nigeria Breweries Plc, Guinness Nigeria Plc, Cadbury Nigeria Plc and Nestle Nigeria Plc were selected for the study. Panel data regression method was used for the method of data analysis and ex-post facto research design was adopted. Data for the study were extracted from the annual reports of the selected companies. The major findings of the study were that turn-over, retained earnings and total assets has a positive and significant effect on financial performance of the food and beverage companies in Nigeria. It is therefore the recommendation of this study that the management of food and beverage companies in Nigeria should adopt appropriate measures to ensure their turnover is maintained above par since it has effect on return on equity as seen from the findings of the study.*

KEYWORDS: Firm Growth, Financial Performance, Firms, Nigeria

INTRODUCTION

The main objective and purpose of a company is a topic of concern in the relevant literature. Profit, growth prospects, and goals, whether complementary or simultaneous, are often seen as the main goals of companies that are still controversial (Aregleyen, 2004). From a different perspective, not all companies have the same growth opportunities, but all companies strive to survive and grow. According to Coad (2007), corporate growth is a matter of "demand" for growth and "supply" for growth opportunities. This means that business growth requires both the willingness to take advantage of growth opportunities and the availability of appropriate opportunities.

Firm growth is therefore one of the central topics of interest to accountants, finance experts, business managers and economists. Research on business growth provides basic insights into one of the key indicators of performance and one of the fundamental factors of the economy (Hanson & Song, 2007). Due to its role in the economy, business growth is of great interest to policy makers because of its importance in job creation and productivity growth. Regulatory programs are often designed to support business growth in the hope that these programs will lead to the creation of new jobs. In addition, firm growth is often seen as an indicator of business performance and is a top priority for executives (Hanson & Song, 2007).

Ubesie and Okeke (2013) posits that companies are registered to accomplish different missions and objectives. The mission and objectives of companies are contained in their strategies and statement of objectives. The major objectives of companies are to make profit, to grow and to add value to the companies. Thus, a company's main goal is to maximize firm wealth or firm value and it is believed by management practitioners that the commonest way to maximize firm value is to grow the company. This growth could be achieved with the aid of retained earnings by pursuing specific organizational financial performance.

In addition to firm growth, the performance of companies constitutes another central topic of interest to a variety of interest groups. With respect to researchers, firm performance is considered as the most significant construct of strategic management research (Hardwick & Adams, 2009). The primary purpose of strategic management research is to identify the determinants of firm performance and thus support managers in increasing the performance level of their companies. For practitioners, firm performance represents the top priority on their agenda. Some academics even state the opinion that sustaining and increasing firm performance should be the ultimate goal of a company (Mauboussin, 2011). However, there is paucity of studies evaluating the relationship between firm growth indicators and financial performance in the food and beverage industry in Nigeria. This dimension is what this study targets at contributing to literature. This study is therefore aimed at carrying out an empirical analysis of firm growth indicators and financial performance of the food and beverage industry in Nigeria covering the period 2010 to 2019. This study used four selected food and beverage firms in Nigeria which include; Nigeria Breweries Plc, Guinness Nigeria Plc, Cadbury Nigeria Plc and Nestle Nigeria Plc. These food and beverage firms were selected for this study because they are all listed on the Nigerian Stock Exchange and the data for the duration of time under study are readily available in their annual reports.

LITERATURE REVIEW

Firm Growth

Growth is what most businesses, regardless of size, are aiming for. SMEs want to grow, large companies want to grow. In fact, businesses need to grow at least little by little each year to cope with increasing spending over time. Over time, salaries will rise and unemployment allowance costs will rise. These two cost areas almost always increase over time, even if other operating costs do not increase (Coad & Hölzl, 2012). It is not always possible to pass on these increased costs to customers and clients in the form of higher prices. Therefore, growth is necessary for a company to continue its business and not only continue its business but also prosper.

Lipczynski and Wilson (2011) found that organizational growth varies from business to business, including increased efficiency, increased power, increased ability to withstand market fluctuations, increased survival, increased profits, and increased economies of scale. He points out that it may bring benefits. Profit prestige of organizational members. Many companies want growth because they are widely seen as a sign of success and progress. Organizational growth is certainly used as an indicator of business effectiveness and is a basic concern of many practical managers.

Financial Performance

The concept of financial performance is an idiosyncratic measure of how well a company can leverage assets in key industries to generate revenue (Akram, 2017). The term is also used as a general measure of a company's overall financial position over a period of time and can be used to compare similar companies in the same industry or to aggregate and compare industries and sectors. increase. Financial performance refers to the achievement or extent to which financial goals have been achieved and is an important aspect of financial risk management. This is the process of monetarily measuring the outcome of a company's policies and operations. The Financial Performance Report is a summary of a company's financial performance that reports on the financial status of the company to help various investors and stakeholders make investment decisions.

Theoretical Review

The Pecking Order Theory

The Pecking Order theory also known as the Hierarchical order theory was first proposed by Donaldson in 1961 and revised by Myers and Majluf (1984). The Pecking order theory states that firms prefer to finance new investments, first internally with retained earnings, then debt, and finally by issuing new equity. It has been suggested that it is difficult to determine the optimal capital structure because equity appears at the top and bottom of the "hierarchy". Insider funds are not subject to any issuance costs and do not require the disclosure of proprietary financial information that may include the company's potential investment opportunities and expected returns. income from making such investments.

The Miller-Modigliani Theory

The Miller-Modigliani Theory was propounded by Miller and Modigliani in 1958. The original ideas presented by Modigliani and Miller are very theoretical and assume conditions that do not fit with the real world e.g. all firms have a constant cash-flow, there exist no taxes and all investors and businesses can borrow and invest at the same risk-free rate. However, Modigliani and Miller's famous theorem (M&M theorem) has made a great contribution to the field of finance as several authors have further developed their original theory. This has resulted in several attempts to formulate why the proportion of debt financing is positively correlated with the return on equity. Today, this formula is better known as the leveraging effect.

Empirical Review

Bassey, Edom and Aganyi (2016) carried out an empirical investigation of the effect of retained earnings on the performance of Niger Mills Company Ltd Calabar Nigeria (2006-2010). The purpose of this study was to assess the importance of retained earnings as an alternative source of funding for a company's activities. Data from the company was obtained from the annual report. The statistical model and method of data analysis was Karl Pearson's product moment correlation coefficient. The results revealed that the future profitability of the company relies on retained earnings. They also found out that the cumulative profits held by the company can increase future profits. Therefore, it was concluded that the company should always retain the profits of its business, rather than fully distributing it to its shareholders.

Ubesie and Okeke (2013) investigated the impact of business growth indicators on business value in Nigeria's manufacturing industry. Twenty-three manufacturers listed on the Nigerian Stock Exchange made up the population surveyed. Seven companies were selected from the population. Secondary data, including a 10-year financial summary from 2005 to 2014, was edited from the annual financial statements of the selected companies. The data were analyzed in both the Pearson correlation test and multiple regression to test the formulated hypothesis. Analysis shows that total sales have a statistically negative impact on the company's net asset value, and total assets, company age, and number of employees have a statistically positive impact on net asset value.

Babalola (2013) investigated the impact of enterprise size on the profitability of Nigerian enterprises. In this study, He used a panel dataset from 2000 to 2009 to analyze the impact of company size on the profitability of a manufacturing firm listed on the Nigerian Stock Exchange. Profitability was measured on return on investment, and both total assets and total sales were used as company-wide proxies. According to the survey results, the size of the company has a positive impact on the profitability of Nigerian manufacturers in terms of both total assets and total sales.

Kintu and Ngugi (2013) studied the determinants of corporate hedging practices used by companies listed on the Nairobi Stock Exchange. The survey period was from 2008 to 2012. Regression model analysis was used to estimate that growth options, long-term leverage ratios, liquidity ratios, and cash flow volatility influence the hedging practices of companies listed on Nairobi Securities. Exchange.

METHODOLOGY

The study adopted the *ex-post facto* design. The survey relies on pre-collected data extracted/calculated from the financial statements of the selected company to be surveyed, and the researcher has no control over the relevant dependent and independent variables.

Area of Study

This research is on the study of the relevance of growth indicators on financial performance of firms in the Nigerian food and beverage industry. It was conducted in Nigeria.

Sample and Sampling Techniques

The sample size consists of four (4) selected companies from food and beverage companies namely; Breweries Plc, Guinness Nigeria Plc, Cadbury Nigeria Plc and Nestle Nigeria Plc. The companies were selected because the data pertaining to the variables for the duration of study were readily available as such - Judgmental Sampling Technique was adopted for sample selection in this research.

Model Specification

In this research, turn-over, retained earnings and total assets will serve as the independent variables representing growth indicators while return on equity representing financial performance will serve as the dependent variable. The model is specified thus:

In implicit form: ROE f = (TO, RE, TA) ……………………. (1)

In explicit form: $ROE = B_0 + B_1 TO + B_2 RE + B_3 TA + \mu$ …….. (2)

Where:

ROE = Return on Equity (it is used as a proxy for financial performance)

TO = Turnover (it is used as a proxy for growth indicators)

RE = Retained Earnings (it is used as a proxy for growth indicators)

TA = Total Assets (it is used as a proxy for growth indicators)

β_0 = Constant Term

β_1 = Coefficient of TO

β_2 = Coefficient of RE

β_3 = Coefficient of TA

μ = Error Term

Method of Data Analysis

In order to estimate the parameters for this study, panel data regression analysis (longitudinal data) is employed because of the estimation of the selected pharmaceutical firms and the

presence of both cross sectional and time series components. Panel data makes it possible to get a handle on the time ordering of variables and to monitor the individual trends over time. In addition, complex and difficult data can be estimated using panel data (Berrington, Smith and Sturgis, 2006).

Panel Unit-Root Test

A Panel unit root test will be conducted as an alternative to time series unit root test to ensure that the data collected is stationary before usage.

Hausman Specification Test

A Hausman test which tests if the μ_{it} correlates with the independent variables (regressors) will be estimated to decide between the fixed or random effects where the:

H0: The suitable model is the random effects model.

H1: The suitable model is the fixed effects model.

Decision Rule

If probability of the Chi square test is greater than the p value =0.05 or 5%, the H0 will be accepted and the random effects model estimator will be used to achieve consistent results, however if the p value is less than 5%, the null hypothesis will be rejected and fixed effects estimator will be used in order to achieve consistent results.

Econometric Software for the Work

To estimate the parameters of this study, the Econometrics views (E-views 9) statistical software will be used for the study.

RESULTS AND ANALYSIS

Descriptive Analysis

Description of the Characteristics of the Variables under Study for the pooled data of Nigeria Breweries Plc, Guinness Nigeria Plc, Cadbury Nigeria Plc and Nestle Nigeria Plc

Table 1

	Skewness	**Kurtosis**	**Jarque-Bera Stat.**	**Prob.**
LT	-0.332303	1.590401	4.148979	0.125621
ROE	-0.259068	2.538895	0.821849	0.663037
LTA	-0.326533	2.004003	2.423281	0.297708
LRE	-1.035190	3.238969	5.972425	0.050478

Source: Author's Computation Using Eviews 9.0

Table 1 contains the description of the variables using normality test which comprises Skewness, Kurtosis and Jarque – Bera Statistics. The table showed that all the variables were negatively skewed relative to normal and logs of turnover, return on equity and total assets are platykurtic as their kurtosis values are less than three (3) while the log of retained earnings and net income are leptokurtic as their kurtosis values are greater than three (3).

The table also showed that all the variables are not normally distributed as the probability values of their Jarque-Bera statistics are greater than 0.05 but this does not discredit the use of these variables as they will further be subjected to other advanced statistical techniques.

Unit Root Test

This test tries to examine the property of the variables. It is used to check for the presence of a unit root i.e. whether the variables are stationary. This test is carried out using the Augmented Dickey Fuller (ADF) test. The ADF is carried out using E-views software package and the results from the test are tabulated below:

Table 2 Pooled Unit Root Test for Nigeria Breweries Plc, Guinness Nigeria Plc, Cadbury Nigeria Plc and Nestle Nigeria Plc

Variables	LLC		ADF – FISHER		PP – FISHER	
	Test Stat.	Order of integration	Test Stat.	Order of integration	Test Stat.	Order of integration
LT	-3.79 (0.0001 <0.05)	I(I)	18.57 (0.049 < 0.05)	I(I)	53.50 (0.0000 < 0.05)	I(I)
ROE	-3.56 (0.0002 < 0.05)	I(I)	-	-	19.24 (0.0038 < 0.05)	I(I)
LTA	-2.86 (0.0021 < 0.05)	I(I)	15.80 (0.0149 < 0.05)	I(I)	36.45 (0.0000 < 0.05)	I (I)
LRE	-41.09 (0.0063 < 0.05)	I(I)	27.99 (0.0716 < 0.05)	I(I)	11.26 (0.0227 < 0.05)	I(I)
LNI	-4.89 (0.0000 < 0.05)	I(I)	-	-	28.08 (0.0001 < 0.05)	I (I)

Source: Author's Compilation from Eviews 9

LLC = Levin, Lin and Chu Test

IPS = Im, Pesaran and Shin W – Stat

ADF FISHER = Augmented Dickey Fuller Fisher Chi – Square Test

PP FISHER = Philip Peron Fisher Chi – Square Test

Table 2 showed that all the variables are integrated of order one or are stationary at first difference.

REGRESSION ANALYSIS

Table 3

Dependent Variable: ROE
Method: Panel EGLS (Period random effects)
Date: 02/11/21   Time: 08:08
Sample: 2010 2019
Periods included: 10
Cross-sections included: 5
Total panel (unbalanced) observations: 48
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	33.25063	4.318343	7.699859	0.0000
LTO	0.345786	0.183155	4.887937	0.0058
LRE	1.717700	0.279759	6.139932	0.0000
LTA	0.871251	0.189609	4.594981	0.0000

Effects Specification		S.D.	Rho
Period random		0.000000	0.0000
Idiosyncratic random		3.891742	1.0000

Weighted Statistics			
R-squared	0.653811	Mean dependent var	10.76870
Adjusted R-squared	0.621607	S.D. dependent var	6.041024
S.E. of regression	3.716055	Sum squared resid	593.7897
F-statistic	20.30237	Durbin-Watson stat	0.916509
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.653811	Mean dependent var	10.76870
Sum squared resid	593.7897	Durbin-Watson stat	0.916509

Source: Author's Computation from E-View 9.0

The F – Statistics shows that the overall estimate of the regression has a good fit and is statistically significant. The R^2 (R – squared) which measures the overall goodness of fit of the entire regression indicates a 65% value while the adjusted R^2 62% hence implying that the independent variables explain the dependent variable to the tune of 62%. Also the Durbin Watson (DW) statistics DW = 0.916509 which hovers around 2.0 indicates the absence of autocorrelation. Thus, the result indicated no serial autocorrelation among the variables under consideration.

From the result in table 3, the coefficient of the variable turnover, retained earnings, total assets and net income indicates positive sign and statistically significant at 5% critical level as their probability values were 0.01, 0.00, 0.00 and 0.01 respectively. Thus, there is a strong relationship between turnover, retained earnings, total assets and return on equity in the short run. This implies that a percentage change (increase) in turnover, retained earnings, total assets and net income will lead to an increase in return on equity. Given the decision criteria to reject H_{O1} if the probability of the t-statistics is < 0.05, Table 3 shows the probability of the t-statistics of $0.0096 < 0.05$ for turnover. We reject the null hypothesis (H_{O1}) and conclude that turnover has a significant effect on return on equity of firms in the food and beverage industry in Nigeria.

Table 4

Dependent Variable: ROE
Method: Panel EGLS (Period random effects)
Date: 02/11/21   Time: 08:08
Sample: 2010 2019
Periods included: 10
Cross-sections included: 5
Total panel (unbalanced) observations: 48
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
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LTA	0.871251	0.189609	4.594981	0.0000

Effects Specification			S.D.	Rho
Period random			0.000000	0.0000
Idiosyncratic random			3.891742	1.0000

Weighted Statistics

R-squared	0.653811	Mean dependent var	10.76870
Adjusted R-squared	0.621607	S.D. dependent var	6.041024
S.E. of regression	3.716055	Sum squared resid	593.7897
F-statistic	20.30237	Durbin-Watson stat	0.916509
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.653811	Mean dependent var	10.76870
Sum squared resid	593.7897	Durbin-Watson stat	0.916509

Source: Author's Computation from E-Views 9.0

Given the decision criteria to reject H_{O2} if the probability of the t-statistics is < 0.05, Table 4 shows the probability of the t-statistics of $0.0000 < 0.05$ for RE. We reject the null hypothesis (H_{O2}) and conclude that retained earnings significantly affect return on equity of firms in the food and beverage industry in Nigeria.

Table 5

Dependent Variable: ROE
Method: Panel EGLS (Period random effects)
Date: 02/11/21   Time: 08:08
Sample: 2010 2019
Periods included: 10
Cross-sections included: 5
Total panel (unbalanced) observations: 48
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	33.25063	4.318343	7.699859	0.0000
LTO	0.345786	0.183155	4.887937	0.0058
LRE	1.717700	0.279759	6.139932	0.0000
LTA	0.871251	0.189609	4.594981	0.0000

Effects Specification		S.D.	Rho
Period random		0.000000	0.0000
Idiosyncratic random		3.891742	1.0000

Weighted Statistics			
R-squared	0.653811	Mean dependent var	10.76870
Adjusted R-squared	0.621607	S.D. dependent var	6.041024
S.E. of regression	3.716055	Sum squared resid	593.7897
F-statistic	20.30237	Durbin-Watson stat	0.916509
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.653811	Mean dependent var	10.76870
Sum squared resid	593.7897	Durbin-Watson stat	0.916509

Source: Author's Computation Using E-Views 9.0

Given the decision criteria to reject H_{O1} if the probability of the t-statistics is < 0.05, Table 5 shows the probability of the t-statistics of $0.0000 < 0.05$ for TA. We reject the null hypothesis (H_{O1}) and conclude that total assets have a significant effect on return on equity of firms in the food and beverage industry in Nigeria.

CONCLUSION

The study concluded that growth indicator has close association with performance of beverage companies in Nigeria. That is as the growth indices increase, there will be corresponding increase in the performance indices like return on equity of the companies concerned. The performance of the company can be mirrored from growth indices.

RECOMMENDATIONS

The following recommendations are made for the study:

1. The management of food and beverage companies in Nigeria should adopt appropriate measures to ensure their turnover is maintained above par since it has an effect on return on equity as seen from the findings of the study.

2. The companies should always retain profits in their businesses if they have to achieve a competitive edge over their rivals and this will equally improve their return on equity.

3. The management of these companies should invest more in assets to further improve on their market value which invariably improves their return on equity.

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