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Effect of Firms' Growth Indices on Profitability of Food & Beverage Firms in Nigeria

UGWU, Rose
Department of Accountancy, Faculty of Management Sciences,
Enugu State University of Science & Technology, Enugu

EZE, Joseph Chukwudi, PhD
Department of Accountancy, School of Financial Studies,
Institute of Management and Technology, Enugu

Abstract
The study appraised the effect of firms' growth indices on profitability of firms in Nigeria. The research adopted *ex- post facto* research design covering the period of sixteen years, 2001-2016. Secondary data was extracted from annual report and accounts of selected brewery firms quoted in the Nigeria Stock Exchange. The data were analyzed using multiple linear regression technique. Findings show that Total assets have significant effect on firm performance in Nigeria; Market value has significant effect on firm performance in Nigeria; and Firm size has significant effect on firm performance in Nigeria. The study recommends that Firms should endeavour to maintain increased assets to boost their performance, carry out necessary market capitalization in order to increase firm market value that would in turn lead to more performance rating. Firms should consolidate on attracting higher share sizes as a means of sustaining the performance of firms in Nigeria.
Keywords: Growth Indicators, Market Value, Firm Size, Profits after Tax

1.1 INTRODUCTION

Firms are set up basically to grow the values of stakeholders among whom are the shareholders. To this extent that firms employ every facility they have in the pursuant of this is therefore not out of place and quite apt. This goal culminate into increasing financial earnings or profitability, pay for operating expenses, pay dividends to the owners of capital and be able to survive in a competitive business environment. The financial performance is also used as a barometer for measuring the strength and survivability of the Nigerian firms in an increasingly fragile business environment where many economic factors are not working in favour of existing firms. According to Verma (2017), Financial Performance in broader sense refers to the degree to which financial objectives is being or has been accomplished and is an important aspect of finance risk management. It is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure firm's overall financial health over a given period of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation.

The definition given by the Business Dictionary (n.d.)on Financial performance is: "measuring the results of a firm's policies and operations in monetary terms. These results are reflected in the firm's return on investment, return on assets, value added, etc." The statement of financial performance is the same thing as Income statement or what some refer to as the Profit and Loss account. On the other hand firm growth can mean different things to different people altogether. A firms growth indices are the outcome or results of the activities or operations of any firm that could enable one determine the financial performance and position at any given time, usually at the end of the accounting period.

Growth indices in the opinion of Coad (2009), are those indicators such as firm size, total assets, economies of scale, firms investment in Research and Development laboratories, growth by mergers and acquisitions, firm market value, and number of people employed. As submitted by Van and Nepelski (2016) others are entrepreneurship and scale up indices. In order to assess framework conditions for the creation and growth of firms in Europe, a set of two composite indicators has been created, called the Entrepreneurship and Scale-up Indices (ESIS). While the first index captures the conditions that favour the creation of business ventures, the latter addresses those that favour the growth of firms. The report on entrepreneurship says Entrepreneurship is a major driver of economic development as it provides the building blocks for job creation and innovation, leading to substantial improvement in human welfare. The welfare of a society depends upon the economic growth of their industries and their people. Through the creation and expansion of firms the economy generates new employment and opportunities making possible a more prosper life for the people.

Francisco Hermelo and Vassolo (2014) opined that growth is the result of exploration of opportunities. Firms are a collection of a certain number of resources that provide the means to successfully take advantage of those opportunities and grow. Recognizing the importance of firms' growth, politicians, economists and international development agencies have devoted substantial resources to the creation and implementation of programs to assist firms' growth and in that way ensure economic prosperity. In order to ensure that these

programs provide adequate results and, therefore, important public and private resources are not wasted, it is important to design highly effective and efficient programs to improve firms' growth. Consequently, it is imperative to understand the process and the variables that grant or constrain firms' growth.

It is against this backdrop that this study appraises the effect of growth indices on the profitability of selected food and beverage firms in Nigeria.

1.2 Statement of the Problem

Assessing the various indicators of growth of a firm and how this plays out on the profits of organizations has been a subject of debate among scholars. The Nigerian national economy is vast and is such that attracts different types of investments from within and outside the various industries such as manufacturing of any kind, transportation, wholesale and retail trade, banking, professional and communication services among others. There are business opportunities in Nigeria for all manner of legitimate business as enumerated above. Despite the numerous occasions for firms to grow, and numerous researches into this topic, we still have a situation whereby firms' financial indices in Nigeria have not been adequately addressed or have not realistically measured the performances of the firms. This is the main focus of this paper, i.e. to determine the effect of firms' financial indices on firm performance in Nigeria.

It is in the light of the above that this paper has evaluated the effect that various key growth indicators play in the profitability of Nigeria firms.

1.3 Objectives of the Study

The broad objective of the study is to determine the effect of firms' growth indices on profitability of food and beverage firms in Nigeria. The specific objectives of the study to:

1. Evaluate the effect of firms' total assets on Profit after Tax of firms in Nigeria
2. Appraise the effect of firms' market value on Profit after Tax of firms in Nigeria
3. Assess the effect of firms' size on firm Profit after Tax of firms in Nigeria

1.4 Research Questions

These research questions as helped in addressing the stated objectives:

1. How do total assets affect Profit after Tax of firms in Nigeria?
2. What effect does market value have on Profit after Tax of firms in Nigeria?
3. How does firms' size affect Profit after Tax of firms in Nigeria?

1.5 Statement of Hypotheses

The following hypotheses in null form were tested in the course of this study:

1. Total assets do not have significant effect on Profit after Tax of firms in Nigeria
2. Market value does not have significant effect on Profit after Tax of firms in Nigeria.
3. Firm size does not have significant effect on Profit after Tax of firms in Nigeria

1.6 Scope of the Study

The study covers firms' growth indices as they affect the financial performance of selected firms in Nigeria and for the period 2001-2016. The indices measuring firms' growth are firm total asset, firm market value and size of the selected firms. Financial performance was proxied using Profit after Tax.

REVIEW OF RELATED LITERATURE

2.1 Conceptual Framework

2.1.1 Total Asset.

The basic accounting equation states that assets = liabilities + stockholders' equity. In the accounting industry, assets are defined as anything that a business owns, has value, and can be converted to cash. Assets are broken down into two main categories. These two categories are current assets and noncurrent assets. Each of these categories is further broken down into subcategories. Total assets are the sum of all current and noncurrent assets and must equal the sum of total liabilities and stockholders' equity combined.

2.1.2 Firm Market Value

Market value encompasses the value at which the firm is worth in the market. Thus for exchange-traded instruments such as stocks and futures, since their market prices are widely disseminated and easily available, but is a little more challenging to ascertain for over-the-counter instruments like fixed income securities. However, the greatest difficulty in determining market value lies in estimating the value of illiquid assets like real estate and businesses, which may necessitate the use of real estate appraisers and business valuation experts respectively. A company's market value is a good indication of investors' perceptions of its business prospects.Market value is the value of a company according to the stock market. Market value is calculated by

multiplying a company's shares outstanding by its current market price (Investopedia,).

The price an asset would fetch in the marketplace. Market value is also commonly used to refer to the market capitalization of a publicly-traded company, and is obtained by multiplying the number of its outstanding shares by the current share price.

2.1.3 Firm Size

The costs of production in these firms of different sizes vary. Economists are concerned with the best size of a business unit, that is, a firm in which the average cost of production per unit is the lowest. So long as the firm has not reached the optimum size it will continue growing. In an ideal world, all firms should grow up to the point at which they are making the most effective and economical use of productive resources. That is to say, all firms should expand until they reach their optimum size."The term 'firm' refers to the business unit or undertaking which owns the plant (the factory, the shop, the warehouse or transport depot), controls and manages it. Thus this term (firm) is broader in its scope. It is essentially a unit of control, ownership and management.

2.2 Theoretical Framework

Below is the review of some related theory of this study:

2.2.1 Grossman-Hart-Moore theory

In modern contract theory, the "theory of the firm" is often identified with the "property rights approach" that was developed by Sanford J. Grossman, Oliver D. Hart, and John H. Moore. The property rights approach to the theory of the firm is also known as the "Grossman-Hart-Moore theory". In their seminal work, Grossman and Hart (1986), Hart and Moore (1990) and Hart (1995) developed the incomplete contracting paradigm. They argue that if contracts cannot specify what is to be done given every possible contingency, then property rights (and hence firm boundaries) matter.

To the specifics, consider a seller of an intermediate good and a buyer. Should the seller own the physical assets that are necessary to produce the good (non-integration) or should the buyer be the owner (integration)? After relationship-specific investments have been made, the seller and the buyer bargain. When they are symmetrically informed, they will always agree to collaborate. Yet, the division of the ex post surplus depends on the parties' disagreement payoffs (the payoffs they would get if no ex post agreement were reached), which in turn depend on the ownership structure. Thus, the ownership structure has an influence on the incentives to invest. A central insight of the theory is that the party with the more important investment decision should be the owner. Another prominent conclusion is that joint asset ownership is suboptimal if investments are in human capital.

2.2.2 Transaction Cost Theory

According to Ronald Coase, people begin to organize their production in firms when the Transaction cost of coordinating production through the market exchange, given imperfect information, is greater than within the firm.Ronald Coase set out his transaction cost theory of the firm in 1937, making it one of the first (neo-classical) attempts to define the firm theoretically in relation to the market.One aspect of its 'neoclassicism' lies in presenting an explanation of the firm consistent with constant returns to scale, rather than relying on increasing returns to scale.

2.3 Empirical Review

Okwo and Ugwunta (2012) studied Impact of Firm's Input Costs on Firm Profitability: Evaluation of the Nigerian Brewery Industry. A cross sectional data was gathered for the analysis from the annual reports of the sampled brewery firms for a period of 1999 to 2010. Measures of profitability are examined and related to proxies for the inputs cost assumed by brewers. The Ordinary Least Squares (OLS) stated in the form of a multiple regression model was applied in the analysis. The study revealed that the focal variable RSGAE (Ratio of Selling and General Administrative Expenses) designed to capture the effect of a company's operating expenses on profitability is statistically positive and impacts on profitability of the brewery firms in Nigeria. Therefore, cost of sale is a major factor to be contained with by Nigerian brewers in enhancing or boosting their profitability.

Ekwe and Inyiama (2014) carried out a related study on Revenue Reserves and Financial Performance in the Brewery Industry: Evidence from Nigeria. The research evaluated the co-integration, magnitude and strength of the relationships between corporate retentions using retained earnings and some key financial performance indicators as proxy, in the Nigeria manufacturing industry. The Brewery sub-sector was used as a focal point. The ex-post facto research designed which made use of secondary data obtained from annual reports and accounts of the two market leaders in the sector: Nigeria Breweries Plc and Guinness Nigeria Plc, from year 2000 to 2013.The magnitude of association of the variables was validated using the ordinary least squares method. Augmented Dickey-Fuller (ADF) test was also conducted on all the variables to check for stationarity of time series data. The Log of retained earnings, current asset ratioand dividend per share, attained stationarity at

first difference, while earnings per share, net asset value per share, price-to-earnings ratio and market price of equity shares, achieved stationarity at second difference. Results indicate that a strong relationship (about 77%) exist between retained earnings and net asset value pershare. Also long run relationship exists between retained earnings, and the rest of the variablesimplying that, if the retained earnings are properly invested, the returns will catalyze growth, development and expansion of the firms while the financialperformance indicators will serve as predictors to the appropriate levels of retentions and investment which could guarantee good bottom line without incurring the opportunity cost of excess liquidity.

Ilaboya and Ohiokha (2016) undertook a study and the fundamental objective was to investigate the relationship between company age, company size and profitability against the background of the learning by doing and structural inertia hypotheses. The study population consisted of the universe of companies (202) listed on the Nigerian Stock Exchange Market as at December 2014. A sample of 30 firms was scientifically selected for the study. The analysis was carried out using archival data from 2006 to 2012, comprising of 210 observations. The panel data regression analysis is the technique for data analysis. The choice of the technique was premised on its property of increase data points and control for individual heterogeneity. The usual classical regression assumption tests were effected to ensure the accuracy of the regression model. It was found that a significant positive relationship exists between firm age, firm size and profitability. The control variable of board size reports a negative and insignificant relationship with profitability. The significant positive relationship between company age and profitability is a confirmation of the learning by doing hypothesis. However, the positive relationship between size and profitability negates the hypothesis of structural inertia.

Echekoba and Ananwude (2016) assessed the effect of financial structure on performance of consumer goods firms quoted in Nigerian Stock Exchange. In this study, twenty three (23) out of the twenty seven (27) firms were randomly chosen for the period 1993 to 2013. The study applied earnings per share and return on equity as performance indices. To add to this, total debt to total equity ratio, short term debt to total equity ratio were adopted to measure financial structure while tangibility, firm size, growth and risk were included as control variables capable of influencing performance. The effect of financial structure on performance was analyzed using pooled ordinary least square, fixed effect and random effect regression technique. The results of the analysis divulged that financial structure represented by total debt to total equity ratio and short term debt to total equity ratio, negatively affect financial performance of consumer goods firms measured by earnings per share and return on equity. The negative effect of financial structure variables: total debt to total equity ratio and short term debt to total equity ratio tends to buttress that as result of agency conflict, performance of firms that are highly geared are negatively affected. The findings also were in conformity with the proposition of the pecking order theory that firm performance and financial structure are negatively correlated.

Akingunola, Olawale and Olaniyan (2017) studied the effect of capital structure decisions on firm performance using a sample of 22listed Non-financial firms on the Nigerian Stock Exchange for a period of five years (2011 – 2015). The study examined the impact of STDTA, LTDTA, and TDTE (being the explanatory variables) on ROA and ROE, which represents the dependent variable while controlling for size, tangibility and Growth. The panel dataset were analysed using pooled, fixed effect and random effect models while Hausman's test were used to select the appropriate model. On the ROA model (panel A), the ratio of short term debt to total asset (STDTA) and total debt to total equity (TD/TE) have significant negative effect on performance. The ROE model (panel B) revealed that short-term debt to total asset (STDTA) and long-term debt to total asset (LTDTA) have significant positive effect on ROE while total debt to total equity (TD/TE) has significant negative effect. Firm size has significant positive effect in both models (ROA and ROE). This implies that, the inclusion of debt (both short term and long term) in the capital structure of a firm positively affect the equity shareholders in terms of firm performance while debt holder might be affected negatively.

METHODOLOGY,

3.1 Research Design and Source of Data

This study adopts the ex-post facto as data employed were historical data. Data for this study were taken from secondary sources. This includes the annual reports of selected firms. establishments.

3.2 Determination of Sample Size

The sample size for this study determined through the probability sampling technique called Simple Random Sampling .

3.3 Model Specification

The modelsfor this study are the Simple and Multiple Regression models or Least Square regression models, expressed as:

$Y_i = f(X_i)$ (Implicit function)

$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e_i$ (Explicit function)

3.4 Description of Variables in the Model

Y_i is the dependent variable and X_i is the independent variable. The dependent variable in this study is firm performance proxy by profit after tax, while the independent variables X_1, X_2 and X_3 are total assets, firm market value andthe firm size, respectively.

The constant is $\beta_0$while the coefficients of the independent variables are β_1, β_2 and $\beta_3$respectively.

DATA PRESENTATION AND ANALYSIS

4.1 Presentation of Data

The following tables show the raw data extracted from the annual reports and accounts of the sampled food and beverages companies are presented in the Appendices.

4.2 Analysis of Data

4.2.1 Regression Results of Profit after Tax on Total Assets

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.917[a]	0.84	0.829	9583.627

a. Predictors: (Constant), TOTASSET

The model summary reveals that at r = 0.917, there is a very strong association between total assets and profit after tax of the food and beverages companies in Nigeria. The coefficient of determination r2 = 0.840 also indicates that total assets strongly determines the changes or variability in the amount of profit hence the performance of firms in Nigeria.

Restatement of hypothesis One

H_{01}: Total assets do not have significant effect on firm performance in Nigeria

Decision rule: Reject H_{01} if p-value < 0.05, otherwise accept.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	p-value
1	Regression	6772685568	1	6772685568	73.74	.000[b]
	Residual	1285842627	14	91845901.96		
	Total	8058528195	15			

a. Dependent Variable: PAT

b. Predictors: (Constant), TOTASSET

Conclusion: The test of hypothesis shows that p-value = 0.000. Since p = 0.000 < 0.05, we reject H_{01} and conclude that total asset has significant effect on the performance of a firm in Nigeria.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	p-value
		B	Std. Error	Beta		
1	(Constant)	6619.991	4368.842		1.515	0.152
	TOTASSET	0.128	0.015	0.917	8.587	0

a. Dependent Variable: PAT

The simple linear regression equation between total assets and profit after tax is represented as follows:

$Y_i = 6619.991 + 0.128X_i + e_i$

The regression equation shows that there is a constant annual growth (β_0 = 6619.991) in profit as well as a variable change in profit as a result of 0.128 change in total asset in a year.

4.2.2 Regression results of Profit after Tax on Market value

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.955[a]	0.912	0.906	7097.539

a. Predictors: (Constant), MKTVALUE

Thisanalysis shows that market value of a firm has a positive and very high degree of association with profit after tax at r = 0.955. It has also been found that Profitability (performance) of firm is highly determined by its marketvalue (being r^2 = 0.912 and adjusted r^2 = 0.906).

Restatement of Hypothesis Two

H_{02}: Market value does not have significant effect on profit after tax of a firm in Nigeria

Decision rule: Reject H_{02} if p-value < 0.0.05, otherwise accept.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	p-value
1	Regression	7353277327	1	7353277327	145.971	.000[b]
	Residual	705250868.9	14	50375062.06		
	Total	8058528195	15			

a. Dependent Variable: PAT
b. Predictors: (Constant), MKTVALUE

Conclusion: From the test of hypothesis, p-value = 0.000. Since 0.000 < 0.05, we reject H_{02} and conclude that Market value has significant effect on performance of a firm in Nigeria.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std. Error	Beta		
1	(Constant)	4317.352	3304.041		1.307	0.212
	MKTVALUE	0.049	0.004	0.955	12.082	0

a. Dependent Variable: PAT

The simple regression model for estimation of PAT could be derived as follows:

$Y_i = 4{,}317.352 + 0.049X_i + e_i$

This implies that there is a constant or steady annual increment of N4,317m on profit after tax due to contribution by market value of the firms. Similarly, there was a variable change or margin of profit during the period being 0.049 attributable to market value of the firms.

4.2.3 Simple Regression of Profit after Tax on firm size

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.794[a]	0.631	0.605	14574.578

a. Predictors: (Constant), FIRMSIZE

The model summary above reveals that there is very high degree of association between firm size and profitability (performance) of a firm. This is represented by r = 0.794 or 79.4%. It also reveals that firm size highly determines firm performance at 0.605 or 60.5%.

Restatement of hypothesis Three

H_{03}: Firm size does not have significant effect on firm performance in Nigeria

Decision Rule: Reject H_{03} if p-value < 0.05, otherwise accept.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	p-value
1	Regression	5084671587	1	5084671587	23.937	.000[b]
	Residual	2973856608	14	212418329.1		
	Total	8058528195	15			

a. Dependent Variable: PAT
b. Predictors: (Constant), FIRMSIZE

Conclusion: The test of hypothesis in the table above shows that p-value = 0.000. Since 0.000 < 0.05, we reject H_{03} and accept the alternative hypothesis that Firm size has significant effect on firm performance in Nigeria.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std. Error	Beta		
1	(Constant)	-128773.934	34279.727		-3.757	0.002
	FIRMSIZE	33.133	6.772	0.794	4.893	0

a. Dependent Variable: PAT

The regression model for this relationship can be represented as follows:

$Y_i = -128773.934 + 33.133X_i + e_i$

This reveals that firm size makes a negative constant contribution to performance while it adds a positive and high variable contribution to the growth of profitability of a firm in Nigeria.

Multiple Regression of Profit after Tax on Total Assets, market value and firm size

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.974[a]	0.949	0.936	5845.133

a. Predictors: (Constant), FIRMSIZE, TOTASSET, MKTVALUE

The model summary confirms that when you combine the three independent variables, there is also a positive and very high correlation with profitability of the firms where r = 0.974. Therefore, total assets, market value and firm size strongly determine the ability of a firm to perform in Nigeria.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	p-value
1	Regression	7648541289	3	2549513763	74.622	.000[b]
	Residual	409986906	12	34165575.5		
	Total	8058528195	15			

a. Dependent Variable: PAT
b. Predictors: (Constant), FIRMSIZE, TOTASSET, MKTVALUE

The test using ANOVA also buttresses the simple regression tests and confirms that total assets, market value and firm size combined, have significant effect on firm performance in Nigeria.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	P-value
		B	Std. Error	Beta		
1	(Constant)	-44003.194	17782.247		-2.475	0.029
	TOTASSET	0.041	0.026	0.295	1.597	0.136
	MKTVALUE	0.025	0.011	0.494	2.376	0.035
	FIRMSIZE	10.82	3.956	0.259	2.735	0.018

a. Dependent Variable: PAT

The multiple regression equation for this relationship could also be represented thus:

$Yi = -44003.194 + 0.041X_1 + 0.025X_2 + 10.820X_3 + e_i$

The equation shows that firm size contributes more to performance while total assets and market value follow in the second and third positions respectively.

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Summary of Findings

Following the analysis, the following result ensued:

1) Total assets have significant effect on profit after tax of firms in Nigeria;
2) Market value has significant effect on profit after tax of firms in Nigeria
3) Firm size has significant effect on profit after tax of firms in Nigeria

5.2 Conclusion

Sequel to the findings, the study concludes that firm's growth indices have positive and strong effect on the performance of food and beverages manufacturing firms in Nigeria.

5.3 Recommendations

In line with the findings and conclusion of the study, it recommends:

1. Firms should endeavour to maintain increased assets to boost their performance
2. Firms should carry out necessary market capitalization in order to increase firm market value that would in turn lead to more performance rating
3. Firms should consolidate on attracting higher share sizes as a means of sustaining the performance of firms in Nigeria.

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APPENDIX ONE : Total Asset, Market Value, Firm Size and PAT of Nigerian Breweries, 2001-2016

Year	Total Asset ₦m	Market value ₦m	Firm Size ₦m	PAT ₦m
2001	68,960	154,300	3,781	8,580
2002	70,460	150,272	3,781	9,286
2003	74,825	201,374	3,781	9,875
2004	77,971	295,064	3,781	10,834
2005	78,406	296,771	3,781	11,458
2006	74,595	282,346	3,781	10,901
2007	90,126	371,430	3,781	18,942
2008	104,413	308,949	3,781	25,701
2009	106,988	400,990	3,781	27,910
2010	114,389	583,074	3,781	30,332
2011	215,447	714,057	3,781	38,433
2012	253,634	1,111,718	3,781	38,043
2013	252,670	1,269,778	3,781	43,080
2014	349,677	1,250,115	3,781	42,520
2015	356,480	1,078,358	3,965	38,049
2016	367,670	1,173,428	3,965	36,474

Source: Annual reports of Nigerian Breweries plc for various years

APPENDIX TWO : Total Asset, Market value, Firm size and Profit after Tax of Nestle Nig. plc, 2001-2016

Year	Total Asset ₦m	Market value ₦m	Firm Size ₦m	PAT ₦m
2001	11,791	69	264	1,563
2002	11,962	70	264	1,434
2003	12,816	75	264	2,938
2004	13,399	79	264	3,835
2005	16,875	99	264	5,303
2006	18,908	124	264	5,660
2007	21,252	183	330	5,442
2008	29,160	251	330	8,332
2009	47,252	158	330	9,783
2010	60,347	243	330	12,602
2011	55,518	353	396	16,496
2012	62,607	556	396	21,137
2013	65,997	584	396	22,645
2014	106,062	802	396	22,236
2015	119,215	761	396	23,737
2016	169,586	642	396	27,925

Source: Nestle Nigeria plc annual report for various years

APPENDIX THREE : Total Assets, Market value, Firm size and PAT of Cadbury Nigeria plc, 2001-2016

Year	Total Asset ₦m	Market value ₦m	Firm Size ₦m	PAT ₦m
2001	9,318	55,100	375	2,816
2002	9,664	55,433	375	3,263
2003	10,763	61,000	375	3.389
2004	20,872	60,012	375	2,816
2005	32,065	65,575	500	2,710
2006	29,664	72,326	500	-4,665
2007	24,283	59,206	550	-464
2008	23,901	58,275	550	-2,953
2009	25,246	61,554	1,565	-2,752
2010	26,138	63,729	1,565	1,143
2011	37,219	90,746	1,565	1,942
2012	39,811	90,746	1,565	3,350
2013	43,231	184,692	1,565	6,023
2014	28,820	77,945	939	2,137
2015	39,417	132,211	939	1,153
2016	42,718	143,283	939	2,623

Source: Firm' Annual Report and Accounts

APPENDIX FOUR :Aggregate of Total Asset, Market value, Firm size and Profit after Tax (PAT), 2001-2016

Year	Total Assets ₦m	Market Value ₦m	Firm size ₦m	PAT ₦m
2001	90,069	209,469	4,420	12,959
2002	92,026	205,775	4,420	13,950
2003	98,404	356,139	4,420	16,202
2004	112,242	355,155	4,545	17,481
2005	127,346	362,445	4,545	19,471
2006	123,167	354,796	4,545	11,896
2007	135,661	430,819	4,661	23,920
2008	157,474	337,475	4,661	31,080
2009	179,486	462,702	5,676	26,131
2010	200,874	647,044	5,676	42,948
2011	308,184	805,156	5,742	62,530
2012	356,052	1,203,020	5,742	62,530
2013	361,898	1,455,050	5,762	69,909
2014	484,559	1,328,862	5,116	66,893
2015	515,112	1,211,330	5,300	62,939
2016	579,974	1,317,353	5,300	67,022

Source: Computation by the Researcher