

## Effect of Corporate Growth Indicators on Company's Value in the Nigerian Manufacturing Sector

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**Abstract:** This study ascertained the effect of corporate growth indicators on company's value in the Nigeria manufacturing industry. Twenty three (23) manufacturing companies listed on the Nigeria Stock Exchange constituted the population of the study. Seven (7) companies which were sampled include First Aluminum Nigeria Plc, Vita foam Nigeria Plc, Beta Glass Nigeria Plc, BOC Glass Nigeria Plc, Berger Paints Nigeria Plc, Lafarge African Plc and Nigeria Enamel Ware Plc. Secondary data comprising of ten (10) years financial summary from 2005 to 2014 were collated from the annual accounts of the selected companies. The data were analyzed using both Pearson Correlation Test and Multiple Regression in testing hypotheses formulated. Results of the analysis show that total sales have a statistically negative effect on the companies' net assets value per share while total assets, firm age and the number of employees has statistically positive effect on the net assets value per share of the Nigeria manufacturing firms during the period under study. Consequent upon the findings, it was recommended that firms should go beyond measuring profitability to measuring growth and value, that companies should invest more money in training their employees and in research and development and finally, that more studies should be conducted on this topic using other sectors of the economy and other methods of data analysis so that results can be compared.

**Key words:** Manufacturing sector • Growth indicator • Company's value and Nigeria

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### INTRODUCTION

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 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. In fact,

Vijayakumar and Devi, (2011), [1], considered growth as the mission of every company which is essential to the success and longevity of any business. Asimakopoulos, Samitas and Papadogonas, (2009), [2], also stated that growth is a very critical factor for the success of any business and that it is the source of evolution and development of a country's economy.

Vijayakumar and Devi, (2011), [1], also opined that growth is an ongoing, orderly and organized process and that profitability has a great influence on it. They further stated that increase in growth takes a long time to achieve

and it requires effort of both employer and the employees at the workplace. Serrasqueiro, (2009), [3], concurred with Vijayakumar and Devi, (2011), [1], when he confirmed that employees are motivated to achieve the growth of the company for their future benefits and that dedication of employees improves their performance resulting in higher growth and profitability. Growth is considered a top strategic priority for most firms yet only few companies achieve growth and fewer can maintain it [4, 5].

Asimakopoulos, Samitas and Papadogonas, (2009), [2], further stated that essentially, all over the World, that a company's growth is dependent upon enabling economic environments and favorable macroeconomic factors like inflation rate, interest rate, foreign exchange rate and availability of energy at affordable price. Creation of employment and stimulation of national economic development can be seen as resultant effect of growth of a company.

According to Ardishvili et al (1998), [6] and Delmar (1997), [7], growth is a gradual process and in the context of the firm, can be defined as an increase in the sales of company, expansion of business through acquisition or

merger, growth of the profits, product development and diversification and also an increase in the number of employees of the firm. It can be deduced from Delmar (1997), [7], that growth can be induced by both internal and external factors. Growth that is induced by internal factors is called sustainable or organic growth. Sustainable or organic growth is that growth which a company can achieve without external financing. The internal factors that can induce growth include, profitability, increase in sales volume or average turnover, increase in number of employee, increase in assets size, age of company, increase in productivity of the company among other factors. External growth on the other hand can be induced by acquisition or merger in order to enjoy the economies of large scale and to grow.

According to Sujko (2007), [8], stated that firm's value is investors' perception about the firm and this is often associated with stock prices of the firms. Company or business value according to Valueadder (2010), [9], is the company's worth, hence he defines business valuation as a process and a set of procedures used to determine what a business is worth. He identifies: (i) asset approach, (ii) market approach and (iii) income approach as three fundamental ways to measure what a business is worth. For the purpose of this study, however, we shall use the asset approach. This is because data on assets and liabilities of companies can easily be collected from the published financial statement of companies whereas the other two are based on market estimates which are not easily available. The asset approach according to valueadder (2010) is the difference between the value of the assets and liabilities of a company, that is, 'the net assets'.

This study focuses on the effect of corporate growth indicators on company's value in Nigeria manufacturing industry as to cover up the research gap given that available literature concentrated on firms' growth and firms' size.

**Statement of Problem:** Companies are established to achieve some vision, mission and objectives. The vision, mission and objectives of companies can be found in the companies' strategies and statement of objectives. In particular, for profit companies are established to make profit, grow and create value for the shareholders and other stakeholders of the company. It is therefore expected that periodically, companies should measure the extent to which these objectives have been achieved. This will enable companies' management ascertain areas that require improvement and how best to maximize the

objectives of the company. It will also enable companies gauge the indicators that have contributed to growth and value and how the indicators affect one another. The information is also important to policy makers and economic planner for the purpose of national economic planning, because companies' growth creates employment and generally stimulates national economic growth.

However, the study of firms' growth and the effect of the growth indicators on company's value are heterogeneous in nature. Couple with this are the variation in the measures used in organizational growth studies, the variation in growth indicators, the variation in the measurement of firm growth over time, the variation in the processes by which firm growth occurs (e.g., organic versus acquisition) and the variation in the characteristics of the firms being studied and their environments [10, 11 and 12].

The main objective of this study is to ascertain the effects of corporate growth indicators on company's value in the Nigeria manufacturing companies. Specifically, this study seeks to:

- Determine the extent to which total sales affects net assets value per share of firms in Nigeria manufacturing industry.
- Ascertain the extent to which total assets affects net assets value per share of firms in Nigeria manufacturing industry.
- Investigate the extent to which age affects net assets value per share of firms in Nigeria manufacturing industry.
- Assess the extent to which total number of employee affects net assets value per share of firms in Nigeria manufacturing industry.

**Research Questions:** Based on the objectives of the study, the four research questions listed below have been raised.

- To what extent will total sales affect net assets value per share of firms in Nigeria manufacturing industry?
- To what extent will total assets affect net assets value per share of firms in Nigeria manufacturing industry?
- To what extent will firms' age affect net assets value per share of firms in Nigeria manufacturing industry?
- To what extent will number of employees affect net assets value per share of firms in Nigeria manufacturing industry?

**Statement of Hypotheses:**

- Ho 1:* Total Sales does not significantly affect net assets value per share in Nigeria manufacturing industry.
- Ho 2:* Total asset does not significantly affect net assets value per share in Nigeria manufacturing industry
- Ho 3:* Firm age does not significantly affect net assets value per share in Nigeria manufacturing industry.
- Ho 4:* Number of employees does not significantly affect net assets value per share in Nigeria manufacturing industry.

**MATERIALS AND METHODS**

The data for this study was collected from seven (7) out of the twenty three (23) manufacturing companies listed on the Nigeria Stock Exchange (NSE). Specifically, secondary data was collected from the annual accounts of seven selected seven manufacturing companies whose data are complete for the period under study. Thereafter the data was subjected to correlation test using Pearson’s Product Moment Correlation Coefficient and Multiple Regression Analysis to test hypotheses and to determine the effect of independent variables on the dependent variable.

**Method of Data Analysis:** Pearson Product Moment Correlation Coefficient and Multiple Regression Analysis were used to test the effect of independent variables on the dependent variable whereby:

- Total Sales (TS), Total Assets (TA), Firms’ Age (FA) and Total Number of Employment (TNE) were used as the independent variables as well as proxies for Corporate Growth Indicators.
- Net Assets Per Share (NAPS) was used as dependent variable and proxy for Company Value.

The Model Specification is Formulated as

$$NAPS = f(TS, TA, FA, TNE)$$

- where,
- NAPS = Net Assets Per Share
- f = Function of
- TS = Total Sales
- TA = Total Assets
- FA = Firm Age
- TNE = Total Number of Employment

$$NAPS = \beta_0 + \beta_1 CR + \beta_2 ACP + \beta_3 QR + \epsilon$$

- where:  $\beta_0$  = constant
- $\beta_1, \beta_2, \beta_3$  = proportionate change in dependent due to change in independent variables.
- $\epsilon$  = error term.

**Data Presentation and Analysis:** The data collected from the selected companies were subjected to Pearson Correlation Test and Multiple Regression Analysis. The objective is to ascertain the effect of corporate growth indicators on companies’ value using total sales, total assets, firms’ age and number of employment as independent variables and proxies for corporate growth indicators and net assets per share as dependent variable and proxy for company value. The results of the analysis were presented in the tables below:

The regression coefficient result which computes the effect of working capital variables on PAT are given in Table 1.

$$NAPS = \beta_0 + \beta_1 NOE + \beta_2 TS + \beta_3 TA + \beta_4 FA + \epsilon$$

$$NAPS = \beta_0 + 0.004NOE - 9.6TS + 1.52TA + 0.138FA + \epsilon$$

NAPS = Net Assets Per Share

where  $\epsilon$  = error margin

Table 2 presents the correlation result between corporate growth indicators (that is, total sales, total assets, number of employees and companies’ age) and the companies value (net assets value per share) of the listed manufacturing firms in Nigeria.

The table shows that there is a significant positive relationship between number of employees and net assets value per share from the correlation coefficient of 0.430 at all level of significance.

The results also indicate that there is a positive relationship between net assets value per share and total sales from the correlation coefficient of 0.564 which is statistically significant at 1% and 5% levels of significance.

The result also shows that there is a relationship between net assets value per share and total assets from the correlation coefficient of 0.584 at 1% and 5% levels of significance.

Moreover, the result as in table shows that there is a positive relationship between net assets value per share and the ages of the companies from the correlation coefficient of 0.276 which is not significant at 1% and 5% levels of significance.

Table 1: Regression coefficients Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	-.952	5.767		-.165	.869
	NOOFEMPLOYEES	.004	.004	.130	1.054	.296
	TOTALSALES	-9.61E-008	.000	-.323	-.534	.595
	TOTALASSETS	1.52E-007	.000	.792	1.277	.206
	AGEOFCOMPANY	.138	.123	.116	1.125	.265

a Dependent Variable: NETASSETS

Table 2: correlation matrix Correlations

		Netassets	Noofemployees	Totalsales	Totalassets	Ageofcompany
NETASSETS	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	70				
NOOFEMPLOYEES	Pearson Correlation	.430(**)	1	.563(**)	.588(**)	.141
	Sig. (2-tailed)	.000		.000	.000	.243
	N	70	70	70	70	70
TOTALSALES	Pearson Correlation	.564(**)	.563(**)	1	.986(**)	.282(*)
	Sig. (2-tailed)	.000	.000		.000	.018
	N	70	70	70	70	70
TOTALASSETS	Pearson Correlation	.584(**)	.588(**)	.986(**)	1	.293(*)
	Sig. (2-tailed)	.000	.000	.000		.014
	N	70	70	70	70	70
AGEOFCOMPANY	Pearson Correlation	.276(*)	.141	.282(*)	.293(*)	1
	Sig. (2-tailed)	.021	.243	.018	.014	
	N	70	70	70	70	70

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.607(a)	.368	.329	8.82998

a Predictors: (Constant), AGEOFCOMPANY, NOOFEMPLOYEES, TOTALSALES, TOTALASSETS

Table 4: ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2951.961	4	737.990	9.465	.000(a)
	Residual	5067.951	65	77.968		
	Total	8019.912	69			

a Predictors: (Constant), AGEOFCOMPANY, NOOFEMPLOYEES, TOTALSALES, TOTALASSETS

b Dependent Variable: NETASSETS

## RESULTS AND DISCUSSION

This study examined the effect of corporate growth indicators on companies' value in the Nigeria manufacturing companies. Secondary data comprising ten years financial summary (2005 to 2014) was collected from the selected companies. The data was analyzed using both Pearson Correlation Coefficient and Multiple Regression analysis whereby the four null hypotheses formulated were tested during the period under review. The results of the findings and discussion are hereby presented in below:

### Hypothesis One:

*H01:* Total Sales of Nigeria manufacturing companies' does not significant affect the companies' net assets per share.

Hence from Table 1, the regression result shows that the total sales has a significant negative effect on the net assets per share, given the coefficient of -9.6E which is significant at 5% level of significance. This suggests that during the period under study, the total sales of manufacturing firms in Nigeria have a negative significant effect on net asset value per share.

Based on this study, we accept the null hypothesis (H1) which states that total sales of Nigeria manufacturing firms has no significant effect on the companies' net asset per share. The study therefore concludes that as total sales increases, the firms' net assets value per share drops or decrease.

**Discussion:** While the correlation test using Pearson's Product Correlation shows a positive relationship, the regression result shows a significant negative effect of total sales on net assets per share. This implies that as sales grow, net assets per share will decline. This result is in agreement with the findings of [13 and 14], but in disagreement with the findings of [15 and 16]. Also why the correlation result is positive, the regression test is negative and contrary to the researcher's a-priori expectation.

#### **Hypothesis Two:**

*Ho2:* Total asset of Nigeria manufacturing companies does not significantly determine the companies' net assets per share.

The result from Table 1 also shows that the total asset has a significant positive impact on the net asset per share, given the coefficient of 1.52 which is significant at 5% level of significance. This suggests that total asset significantly determines the net assets per share of listed manufacturing firms in Nigeria during the period of the study.

Based on this result, the study hereby rejected the null hypotheses (H2), which stated that total assets does not significantly determine the companies' net assets per share, hence the correlation test shows a significant positive relationship between total assets and net assets per share. Regression result also shows significant positive effect of total sales on the net assets per share. This result is in agreement with the findings of [17, 18, 19 and 20]. The simple explanation of this result is that as assets of the companies grow, net asset also grows.

#### **Hypothesis Three:**

*Ho3:* The age of Nigeria manufacturing companies does not significantly affect the companies' net assets per share.

From Table 1, the regression result shows that ages of Nigeria manufacturing firms listed at the stock exchange has a positive effect on the companies' net assets per share during the period under study.

Based on this, the study hereby rejects the null hypotheses which states that the ages of Nigeria manufacturing companies does not significantly affect the companies' net assets per share. This study suggests that the age of the listed manufacturing companies drives the net assets of the listed Nigeria manufacturing companies. It follows that the result of the correlation test shows a significant positive relationship between net asset per share and ages of the companies. Also the ages of the companies have positive effect on the net assets per share. These result is in agreement with [21 and 22] and disagrees with [23 and 24] as well as [25]. This implies that as companies grow old, they use the experience acquired over the years to maximize return and increase the value of the companies.

#### **Hypothesis Four:**

*Ho 4:* The number of employees in the Nigeria manufacturing companies does not significantly influence companies' net assets per share. The result of the analysis in table1, shows that the number of employees of the Nigeria manufacturing companies has a statistically significant positive influence on the companies' net assets per share at coefficient of 0.04 which is significant at 5% level of significance. That is to say, that the number of employees has significantly improved the companies' net assets per share in Nigeria manufacturing firms during the period under review.

Based on this result, this study hereby rejects the null hypotheses (H4) which states that the number of employees in the Nigeria manufacturing companies does not significantly influence companies' net assets per share. Hence, the correlation test shows a statistically positive relationship with the companies' net assets per share and the number of employee just as the regression result shows that the number of employees has significant effect on the net assets per share. This result is expected and in line with the opinion of [26 and 27], as contained in the literature review.

### **CONCLUSION**

Based on the findings and deduced discussions, we hereby conclude as follows:

- That total sales of the Nigeria manufacturing companies negatively influence the companies' net assets per share. This implies that as sales grow, net assets per share declines and vice versa.

- That total assets of the Nigeria manufacturing companies determines the companies' net assets per share. As total assets grow, net assets per share also grow and vice versa.
- That the ages of the Nigeria manufacturing companies have positive effect on the company's net assets per share. This means that as the companies grow in age, it uses its experience to grow the companies' value in terms of the net assets per share.
- Finally that the number of employees of the Nigeria manufacturing companies determines the net assets per share. This implies that as the number of employees grows, the companies' net assets per share also grows and vice versa.

**Recommendations:** Consequent upon the findings, we recommend as follows:

- Companies should go beyond measuring profitability to measuring growth and value that have been added during the period under review. It is also important to measure how the indicators relate with the companies' value. This will enable companies create value while maximizing profit.
- That companies should invest more money on training of their employees and in research and development. This is because growth indicators like companies' age and number of employees significantly and positively influence company's value. With staff training and investment in research and development, companies' value will be maximized.
- That more researchers should carry out further studies on this topic using other sectors of the economy. This is to enable the results to be compared for future use by companies and government policy makers.

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