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# EFFECT OF CORPORATE DIVERSIFICATION STRATEGIES ON THE FINANCIAL PERFORMANCE OF INDUSTRIAL GOODS IN NIGERIA

EHIEDU, Victor C<sup>1</sup> (Ph.D) & Imoagwu Chika Priscilla<sup>2</sup> (Ph.D)

<sup>1</sup>Department of Banking & Finance, Faculty of Management Sciences Delta State University, Abraka, Nigeria

<sup>2</sup>Economics Department, Faculty of the Social Sciences Nnamdi Azikiwe University, Awka, Nigeria

\*Corresponding Author: EHIEDU, Victor C Corresponding Author Email: <u>ehieduvc@gmail.com</u> Article Received: 03-10-22 Accepted: 17-10-22

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## ABSTRACT

Business environment in Nigeria is becoming increasingly competitive, uncertain and complex. These changes are happening so fast that organisations that desire to remain in business must speedily adapt and adopt new strategies to meet the demands of the dynamic business environment. The research determines the effect of corporate diversification strategies on the financial performance of industrial goods. The research espoused the ex-post facto data from annual reports of the selected listed industrial goods companies on the Nigerian Stock Exchange (NSE) from 2012 to 2021. The least square regression analysis was used to evaluate the effect of the independent variables on the dependent variable. It was found that Income diversification has no significant effect on the return on assets of industrial goods companies in Nigeria. Also the study revealed that business segment diversification has considerable effect on the return on assets of

industrial goods companies in Nigeria. It recommends that policy makers should promote policies that encourage listed firms to practice corporate diversification and companies should evaluate their strengths and weaknesses to enable them leverage on the opportunities presented by corporate diversification. Also, parent companies should ensure they are strategic while engaging in business segment diversification strategies.

**Keywords:** Corporate Diversification, Financial Performance, Industrial Goods, Business Environment, Opportunities.

## INTRODUCTION

Business environment in Nigeria is becoming increasingly competitive, uncertain and complex. These changes are so fast that organisations that desire to remain in business must speedily adapt basic demands of the dynamic business environment. The increasing competition and the rise in global competition have stunted companies' growth. Umar and Umar, (2020) rightly described today's business environment as uncertain, dynamic, volatile, and hyper-competitive, coercing businesses especially in the manufacturing sector to find new ways of sustainable growth and development. Additionally, the current economic situation presents a challenging business atmosphere for corporate Nigerian firms.

Manufacturing sector as listed by the Nigerian Stock Exchange (NSE) recorded tremendous growth over the years. However, in the wake of the economic recession that hit the country around 2016, this sector was one of the most badly hit. It began when the Central Bank of Nigeria (CBN) removed 41 items from the lists of users of overseas swap given their high level of dependence on foreign exchange for purchase of materials and sometimes labour. Skyrocketing rate of foreign exchange and lateness in supplying it after payment stifled growth in that sector.

Umar and Umar, (2020) further decried the decadence in physical infrastructures, particularly roads and electricity, corruption, and bureaucratic bottleneck that has stifled growth rate. The situation is worsened by the global fall in the price of crude oil which is experiencing backwardness, making many critical sectors, including the manufacturing sector to be devastated and reducing revenue generation.

The consequence is often tragic and the ripple effect is far-reaching. Production outputs along with income and profitability plummeted. Several workers were laid off while the surviving ones had their salary reviewed downwards. According to NSE, the industrial sector index recorded the steepest drop of the year in 2017 at 26.37% which is the result of the harsh operating environment, the issue of forex and the general uncertainty of the policy direction of the federal government (Nnorom, 2017).

Competitive pressures resulting from economic and political factors are forcing several businesses to react to these changes with improved quality services and/or products. In spite of the efforts of organisations to adopt and implement improved service delivery, they still find themselves in need of reinvigoration by way of strategic shifting of the organizational structure from "what is now" to "what it has to be", in order to maintain competitive edge and satisfy customer's needs at a profit.

Many firms are strategically expanding beyond their traditional operational activities to overcome this awful situation, (Ehiedu and Toria 2022). Therefore, Chirani and Effatdoost, (2013) defined diversification strategy as the degree of partaking in diverse undertakings. The volatility of carrying out businesses makes the strategic decision to diversify through knowing the correct combination of a company's strength and business mix very important for firm to survival (Ehiedu, Onuorah and Okoh, 2021).

Theoretical evidence from previous studies suggests that diversification attracts benefits and costs effects (Nguyen & Cai, 2016). Empirically, however, results of prior researches are rather inconclusive given that diversification in income sources and business segments have not been exhaustively explored by previous studies especially in Nigeria. This therefore, is the basis of this present study while concentrating on the industrial goods sector of NSE.

## **REVIEW OF RELATED LITERATURE**

## **Diversification Strategy**

Diversification idea goes originally back to Markowitz (1952) that described the notion of risk reduction by going into other group of securities (Obi and Ehiedu, 2020, Ugwuanyi, Ani, Ugwu & Ugwunta 2012). The intensity of risk in a diversified business group is determined by the correlations of those securities that is either less risky or more profitable than a weighted average of its individual securities. However, conceptual travelling caused adoption of this concept to many research areas other than finance (e.g., corporate development and corporate finance). For example, from a strategic management perspective, corporate diversification describes firm expansion into new business activities through strategic partnerships. Consequently, the extent to which firms are operating in various industries (segments), is termed diversity.

Diversification strategy implies expanding or entering in new markets different from the firm's existing product lines or markets (Nguyen & Cai, 2016; Odita, Ehiedu and Kifordu, 2020). Again, diversification strategy is a strategy implemented by the top executives by exploring new business ventures for business growth and improved returns from more opportunities (Ehiedu, Odita and Kifordu, 2020; Wan 2016).

Generally, diversification implies entry into a new market and/or increase in the kinds of businesses a firm operates among others. In essence, it can be products related, geographical area or knowledge-related.

**Related Diversification (Concentric):** Related Diversification refers to firm expansion of its operations into relatively new areas with a variety of product lines and markets but within the same sector. Related diversification is strategically beneficial to organisation as it provides different operational areas to share the organisation's physical and intangible resources thereby minimizing cost. It also promotes the exchange of organisational skills and contributes to building brand and reputation. Related diversification facilitates the growth by facilitating technological superiority of one department to the advantage of another. This diversification is subdivided into two; horizontal and vertical diversification.

**Horizontal Diversification:** This is strongly associated to firm's business mainstay. However, it is outside of its existing market and product streak. The new business meadow might be paired to an active product streak, a by-product of an active product or a further product that will initiate an economic benefit for the corporation (Ehiedu and Toria, 2022).

**Vertical Diversification:** Vertical Diversification refers to any diversification in course of production involving multiple steps and the firm decides to perform any process using its own facilities.

**Unrelated Diversification (Conglomerate):** This is where an organisation enters a new business or product line which is not exactly associated with an earlier one. The main aim of related horizontal diversification is the creation of synergy by planned administration while unrelated diversification is for financial investment company (Ehiedu and Toria, 2022; Wanjira, Ngoze & Wanjere 2018).

Unrelated Diversification is strategically advantageous for organisations because it aids them to reduce operational and other risks. It helps in reducing transaction and its related service costs. It also facilitates access to relevant managerial skills.

#### **Income Diversification**

Income diversification involves the process of having increasingly diverse livelihood portfolios, making use of increasingly diverse combinations of resources and an asset in order to meet an organisation's basic needs (Odita and Ehiedu 2015), (Wan, 2016). Income diversification is subdivided into product-income which implies income realized from the companies' products' sales and non-product income diversification plus income generated from other organisation's business activities.

#### **Business Segment Diversification (BSD)**

This is an operational unit of a business known by the merchandise or services it provides and renders. A segment operates as a unit and separately identified from the organization's operations with customers it serves or the merchandise or services it renders and market places it serves. BSD is a situation where a business expands its business operations to penetrate an area different from the firm's active product streak. BSG identifies performing and weak areas of a firm's productivity.

## **Financial Performance (Profitability)**

Profitability is a measure of financial performance (Odita, Ehiedu & Kifordo, 2020). It is calculated as the excess of revenue over expenses incurred. It is one of the major objectives of a business organization. Profitability stems from the word "profit" which many scholars have shown to be ambiguous. Profitability ratios are calculated to proxy firm's operating efficiency. Not only management is interested in firm's profitability but also other stakeholders. Thus, it would be expected that managers of profitable companies would be motivated to disclose more information in order to distinguish themselves from the less profitable companies.

According to Pandey (2020) Profitability could be measured in relation to sales or investment. It is mainly measured using ratios like the Net Profit Margin, Gross Profit Margin, Operating Margin, Return on equity (ROE) and Return on Assets (ROA).

**ROA** is the ratio of annual net income to average total assets of a business during a financial year. It measures efficiency of the business in using its assets to generate net income. It is also a profitability ratio. It indicates the number of kobo earned on each naira of assets.

**ROE** is a profitability ratio that measures the ability of a firm to generate profits from its shareholders investments in the company. In other words, the return on equity ratio shows how

much profit each naira of ordinary shareholders' equity generates. It is calculated as net income divided by total equity.

**Net Profit Margin**: this measure establishes a relationship between net profit and sales and indicates management's efficiency in the running of the firm. This ratio also indicates a firm's capacity to withstand adverse economic conditions.

**Gross Profit Margin**: this measure of profitability reflects the efficiency with which management produces each unit of product. It indicates the average spread between the cost of goods sold and sales revenue. It is calculated by dividing the gross profit by sales.

## THEORETICAL FRAMEWORK

The Market Power Theory (MPT) developed by Treacy and Wiersema in 1995 underpins this present work. It clearly identifies the idea that business quality is a product of market forces. Christingrum, (2015) rightly emphasized the positive effect of a multi-segment strategy. A firm can increase its market share in the industry it operates by pursuing diversification and reducing competition on the market because of its dominance. Diversified companies have a greater competitive advantage from being less competitive than other businesses which helps them to maximize their flexibility. The firm is able to maintain monopolistic control by having a larger market control, (Omojefe & Ehiedu 2017), (Maragia & Kemboi 2021). This theory assumes that produces a low percentage of market output without influencing the prevailing market price, each firm has to accept the market price and many individual buyers also lack control over the market price. Also this theory assumes that there is perfect freedom of entry and exit from the industry. The implication of this is that all firms in a perfectly competitive market is expected to realize normal profits in the long run.

The theory is considered relevant to this study because it affords organisations the opportunity to divert excess profit from one industry or business unit to another with the aim of gaining competitive advantage and reciprocal forbearance that may result from the synergy crated by adopting such strategy. The goal is to ultimately boost cost effectiveness and enhance financial performance.

## **EMPIRICAL REVIEW**

Onuorah, A C, Ehiedu and Okoh, (2021), Mwangi, (2015) had a census approach deploying secondary data for five years (2010-2014) to determine the effect of corporate diversification on the financial performance of listed manufacturing firms in Kenya. The data was gathered from financial statements and records. Data analysis was done using a regression model. The result shows that corporate diversification was positively associated with profitability of listed firms in Kenya. Growth and firm size were found to be negatively related to financial performance of listed manufacturing firms. The correlation results were weak but moderate for financial performance and corporate diversification.

Odeleye and Olunkwa (2016), Onuorah, Ehiedu, & Okoh, (2022), examined the relationship between export diversification and economic growth in Nigeria. The study used an annual time series data for the period 1981-2015 and employed Ordinary Least Square (OLS) methods involving Error Correction Mechanism (ECM), Co-Integration, and Over-Paramatization and Parsimonious model. The findings showed that contributions of agriculture and the manufacturing

sector to export was negative. This implies that export diversification has negative consequence on Nigeria's economic growth.

Agbogun, & Ehiedu, (2022), Rop, kibet and Bokongo (2016) investigated the Impact of portfolio diversification on financial performance of commercial banks in Kenya. The study concluded that much work was needed to promote diversification of bank portfolios.

Maina, (2016) examined horizontal diversification strategies as a determinant of performance of real estate firms in Nairobi. The study concluded that horizontal diversification positively affects firm performance although not statistically significant. The study therefore recommended that real estate companies should come up with good policies such as guidelines on per unit cost allocation of diversified product and risk management strategies of the risks involved in the whole diversification process.

Ayobola, Ekundayo, Muibi (2018) examined the relationship between resource endowment and export diversification and its implication for economic growth in Nigeria based on data from 1981 to 2015 and found that specialization is preferred to diversification.

Ogbonna (2018), Ehiedu and Odita (2014) studied the association connecting private sector development and economic diversification from 1999Q1-2016Q4. Employing Nigerian data, it found that private sector investment was a considerable determinant of economic diversification.

Nwakoby and Ihediwa, (2018), Ehiedu,. & Ogbeta, (2014), studied the effect of firm diversification on financial performance of Nigerian firms from 2008 to 2017. The study data were analyzed using financial ratios and the formulated hypotheses were tested with simple regression analysis using statistical package for social sciences (SPSS) 20.0. This result was that the financial performance of Nigerian firms was significantly affected by the product, hence there was a relatively statistical significant correlation between financial performance and related diversification but business diversification was not statistically significant.

Ehiedu, and Olanye (2014), Abolarinwa (2020) examined the mediating role of global economic crises (GECs) in the effect of growth strategies on Nigerian manufacturing firms' performance (2000 and 2017). Data cluster analysis was adopted for the period approximating a GEC, (pre-and post-crisis periods). Result showed an affirmative and statistically considerable consequence of internal growth policy on ROA and ROE (coefficient = 9.474 and 6.277; P < 0.01). Nevertheless, result established that external growth policy unenthusiastically but greatly influenced ROA (coefficient = -6.005; p-value<0.01) whereas the consequence is confidently considerable on ROE. For GECs, it establishes a statistically considerable annulled consequence. Result confirmed that GECs and external growth policy had a affirmative and considerable consequence on ROAs, while their mediation with internal growth policy was depressing but considerable outcome on ROAs and ROE (coefficients = -1.480; -2.041, p-value<0.05; coefficient = 2.194, p-value<0.05; 0.608, p-value <0.05).

## METHODOLOGY

The population study comprised fourteen (14) companies quoted under the industrial goods sector of the Nigeria Stock Exchange (NSE) as at December 31, 2019 for the test periods from 2012 to 2019. The explained variable (firm performance) was proxied by ROA while the explanatory variable was proxied with income diversification and business segment diversification. Income Diversification was calculated by the ratio of other income to the total assets while Business

Segment Diversification was proxied by the number of disclosed business segment in annual reports.

#### **Model Specification**

The functional notation form is stated below:

Performance (PERF) = f(Diversification - DIV)

The proxy variables are econometrically expressed in the equation below:

 $ROAit = \beta o + \beta_1 IDIVit + \beta_2 BSDVit + \varepsilon it$ 

Where:

IDIV = Income Diversification

BSDIV = Business Segment Diversification

ROA = Return on assets

 $\epsilon$  =error term

t = Time period.

i = Cross section dimension and ranges from 1 to N

Table 1

 $\beta o = Intercept$ 

 $\beta_{1,2}$  = Coefficient for independent variables

Descriptive Statistics of the Variables					
INCOME	DIVROA	SEG DIV			
0.010338	0.0966	512 1.975207			
0.005380	0.0700	000 2.000000			
0.083560	0.7900	000 4.000000			
-0.001880	-0.3600	000 1.000000			
0.015146	0.1725	557 1.003849			
2.766005	1.5715	505 0.645192			
11.72713	7.5421	84 2.253092			
538.2785	153.82	210 11.20744			
0.000000	0.0000	000 0.003684			
1.250840	11.690	000 239.0000			
. 0.027527	3.5731	111 120.9256			
121	121	121			
	INCOME 0.010338 0.005380 0.083560 -0.001880 0.015146 2.766005 11.72713 538.2785 0.000000 1.250840 . 0.027527	INCOME_DIVROA   0.010338 0.0966   0.005380 0.0700   0.083560 0.7900   -0.001880 -0.3600   0.015146 0.1725   2.766005 1.5715   11.72713 7.5421   538.2785 153.82   0.000000 0.0000   1.250840 11.690   0.027527 3.5731			

#### ANALYSIS OF DATA & DISCUSSION OF RESULT

Source: Researcher's computation using Eviews 9

Table 1 presents the descriptive statistics of the dependent and independent variables. The mean value of return on assets is 0.0966, minimum and maximum value is -0.36 and 0.79 respectively and a standard deviation of 0.173. This shows that most of the companies made a return on investment in assets of about 10% of their investment and has a slight deviation from the mean. Income diversification has a mean value of 0.0103, a minimum value of -0.0019, a maximum value of 0.084 and a standard deviation of 0.0151. Business segment diversification has a mean value of 1.975, a minimum and maximum value of 1.00 and 4.00 respectively and a standard deviation of 1.0818. This shows that the companies sampled in this study had an average of 2 segments for the periods under review.

Table 2Least square Regression ResultDependent Variable: ROAMethod: Least SquaresDate: 09/19/21 Time: 19:42Sample: 1 135Included observations: 121					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
C INCOME_DIV SEGMENTS	0.146340 0.941844 0.030106	0.034951 1.044418 0.015758	4.187020 0.901788 2.510543	0.0001 0.3690 0.0485	
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.329251 0.196561 0.171122 3.455372 43.43800 2.010378 0.138500	S.D. depe Akaike in Schwarz c	fo criterion criterion Quinn criter.	0.096612 0.172557 -0.668397 -0.599080 -0.640244 0.314699	

Source: Researcher's computation using Eviews 9

The regression test model for the effect of income diversification on return on assets of industrial goods companies in Nigeria can be represented as follows:

 $ROAit = .1463 + .9418 IDIVit + .0301 BSDVit + \epsilon it$ 

The value for R-squared (multivariate equivalent for the bivariate correlation coefficient) in the model is 0.329, which translates to 32.9% of the total variation in return on assets. The adjusted R-squared is 0.197 tells how much of the variance in the dependent variable (return on assets) is explained by the independent variables in the model (Ehiedu, and Obi, 2022), (Field 2000; Fan Ong, & Koh 2006; Pallant 2007). Expressed in percentage, autonomous variables explained about 19.7% of the variance in return on assets. Apart from these indicators, the model is also fairly significant in assessing the effect of Income diversification on the return on assets of industrial goods companies in Nigeria.

#### **Hypotheses One**

H<sub>o</sub>: Income diversification has no significant effect on the return on assets of industrial goods companies in Nigeria.

The first hypothesis was formulated to test the effect of Income diversification on the return on assets of industrial goods companies in Nigeria. The regression model result in table 2 above showed that the t-statistics is not significant at 0.05 level of significance. Based on the decision rule which states that we reject the null hypothesis if  $t_{cal} > t_{tab}$ . Given that  $t_{cal} = 0.9018$  and  $t_{0.05,121} = 1.9798$ , we therefore accept the null hypothesis and conclude that Income diversification has no significant effect on the return on assets of industrial goods companies in Nigeria.

## **Hypotheses Two**

H<sub>o</sub>: Business segment diversification has no significant effect on the return on assets of industrial goods.

The second hypothesis was formulated to test the effect of business segment diversification on the return on assets of industrial goods. The regression model result in table 2 above showed that the t-statistics was not significant at 0.05 level of significance. Based on the decision rule, we reject the null hypothesis if  $t_{cal} > t_{tab}$ . Given that  $t_{cal} = 2.5105$  and  $t_{0.05,121} = 1.9798$ , we reject the null hypothesis and conclude that Business segment diversification has a significant effect on the return on assets of industrial goods.

#### **Discussion of Findings**

Findings from the first hypotheses reveal that Income diversification has no considerable consequence on the ROA of industrial goods. This finding is in agreement with that of Manyuru, Wachira and Amata (2017) who stated that geographical diversification does not have a significant impact on firm value. Also, the findings of Mwangi, (2015), Ehiedu, Odita, & Kifordu, (2020) determined the outcome of business diversification on the financial performance of listed manufacturing businesses in Ghana was not in agreement with this present study. Mwangi, (2015) found that business diversification was absolutely linked to financial performance of listed manufacturing firms in Ghana.

The study further reveals that Business segment diversification has a considerable consequence on ROA of industrial goods. This is consistent with the findings of Odeleye and Olunkwa (2016) that examined the relationship between export diversification and economic growth in Nigeria and found that export diversification has negative effects on Nigeria's economic growth. Also, Onuorah, Ehiedu &Okoh, (2021), Mulwa and Kosgei (2016) who investigated the impact of diversification, solvency and credit risk on financial performance found that income and asset diversification negatively and significantly affects the commercial banks ROA. Similarly, Maurizio, Tiziana and Javier (2018) examined the effect of diversification strategy on corporate value and found that related diversification has a negative effect on fir financial performance. They concluded that diversification cannot automatically improve profitability. Thus, it is better firms to stay on a product line progressive financial performance.

## CONCLUSION

In this study, income diversification has no considerable consequence on ROAs of industrial goods. The implication of this finding is that the profitability of a company is not particularly linked to extent of diversification of its portfolio. Multiple income centres does not automatically translate to more profit for businesses. In practice, income diversification is only favourable when the various income centres are also profit centres as an unprofitable venture of a business will translate to a liability for the business rather than contributing to the profit pool from the other centres.

Furthermore, business segment diversification has a considerable consequence on the ROAs of industrial goods. Business diversification strategy can either be in form of a market expansion, brand extension or a product extension. The implication of this finding is that when such expansion

occurs, it is expected that it will result to more profit from the pool of revenue generated from the various segments. The segments contribute marginally to the overall profitability of the company, thereby increasing the profit that would have been generated from the individual segments. However, this premise is only obtainable where the segments are individual profitable.

The importance of adopting the best diversification strategy for a business cannot be overemphasized. Moreover, making the right strategic choice is essential as it has a direct impact on the profitability of firms. An attempt has been made in the present study to determine the effect of corporate diversification strategies on the financial performance of industrial goods companies in Nigeria for the period 2012 to 2019.

Starting and growing a business over a long period of time is not an easy task. The ability to overcome daunting challenges while maintaining a competitive edge remains subject to making the right decisions and adopting the right strategies.

Diversification has proven to be a strategic tool in the hands of business entities to increase their profitability. Though there have been cases of diversification that turned out to be failures and frustrated corporations out of business. Results obtained indicate that income diversification has no considerable consequence on the ROAs, while business segment diversification also has a significant effect on ROAs of industrial goods.

#### Recommendation

Based on the findings of this study, we made the following recommendations:

- 1. Policy makers like capital markets operators and regulators should promote policies that encourage listed firms to practice corporate diversification to mitigate their financial losses and boost their profitability.
- 2. Companies should evaluate their strengths and weaknesses to enable them leverage on the opportunities presented by corporate diversification to build stability and spread risk other than concentrating on a single industry or product. This will enhance their predictability about the future and thus boost their financial strengths through making profitable investments decisions.
- **3.** Parent companies should ensure they are strategic in engaging business segment Diversification Strategies.

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