

Evaluation of Firms' Corporate Financial Indicators and Operational Performance of Selected Firms in Nigeria

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Abstract

The study examined the effect of firms' growth indicators on operational performance of selected firms in Nigeria. Firm size and profitability firms' are the proxies for operational performance while Return on Assets was the measure for financial performance. The study adopted the ex-post facto research design. Data were sourced from the financial statement of firms studied. Multiple regressions were used for analysis. Results show that firm size and profitability have significant a negative and insignificant effect on Return on Assets. The paper recommends that firms should strive to increase firms size and profitability at a level that will positively and significantly affect Return on Assets.

Keywords: Firms' Financial Indicators, Firms' Size, Profitability, Operational Performance, Return on Assets.

1.1 Introduction

The factors that induce the growth and indeed the performance of firm can be enormous. Paramount among them is the ability of the management to harness and optimally take decisions that could impact positively on the firms. Firms ability to make and sustain profitability is key and basic in this regard. Investigators such as Panu, Peng and Dennis (2007) and Kogan (2012) have also found a strong relationship between firm size and profitability. Smaller firms appear to generate higher returns than larger firms. Again, the interpretation of these results is controversial. The excess returns of small firms can be interpreted as inefficiency, but they also may represent compensation for bearing risk. Smaller companies may be far more sensitive to economic shocks than are larger firms (Enufe and Oladutire, 2014).

Growth is another characteristics of firm that is perceived to influences profitability (Yasuda, 2005). Sales and income growth can be expected to influence rate of return and market value measures in both simulated and actual industries. It is unclear if growth in one year will affect profitability and market value measures in a succeeding year in simulated and actual environments. Asset growth, which can be used as a proxy for plant and equipment expenditures, and research intensity, may also affect sales and income growth in a base year or succeeding year, indirectly affecting profitability and market value (Kugari, 2013).

Firm age (measured as the number of years a company is operating in the market since it was founded) is an important determinant of financial performance and stock returns (Kaguri, 2013). Past research shows that the probability of firm growth, firm failure, and the variability of firm growth decreases as firm's age (Evans, 1987; Yasuda, 2005). According to the life cycle effect, younger companies are more dynamic and more volatile in their growth experience than older companies (Kogan, 2012). Maturity brings stability in growth as firms learn more precisely their market positioning, cost structures and efficiency levels and these influences stock prices. Profitability of the firm is another dimension of the firm's characteristics (Kaguri, 2013). EPS (Earning per share), which is a function of profitability usually have significant positive influence on market return as shown in many past researches.

In the light of this, the higher the firm's EPS, the higher market adjusted return and abnormal return that can be resulted by firm's stock, because a higher EPS means higher profit obtained from every dollar price earned by the firm. Investors/shareholders consider current earnings, future earnings, and earnings stability are important, thus they focus their analysis on firm's profitability Oloidi and Bolade(2015). They concern financial condition which will affect firm's ability to pay dividend and avoid bankruptcy.

It is in against this backdrop that this paper evaluated the firms' corporate financial indicators and operational performance of selected Nigeria firms.

1.2 Statement of Problem

There are several elements that determine financial performance. Some are external (macro-economic variables) and others are internal (within the firm). It is generally understandable that macroeconomic forces such as gross domestic product, inflation rate, regulatory policies and the likes, affect financial performance to a great extent. There are many literatures to this effect, Hamdan and Yusnidah(2013). But to what extent do internal factors within the firm affect their performance? Though many literatures/researches abound that investigated the relationship of firm characteristics and performance Onufe and Oladutire(2014) and thus the need for this study.

It is in the light of this, that this study has evaluated the effect of firms' corporate financial indicators on the operational performance of selected firms in Nigeria.

1.3 Objectives of the Study

The primary objective of this study is to determine the effect of firms' corporate indicators on the financial performance of selected firms in Nigeria.

The specific objectives are:

- (i) To appraise the effect of firm size on return on asset (ROA) of selected firms in Nigeria
- (ii) To examine the effect of profit after tax on return on asset of selected firms in Nigeria.

1.4 Research Questions

The following questions assisted in addressing the objectives of the study:

- (i) What is the effect of firm size on return on asset of selected firms in Nigeria?
- (ii) How does profit after tax affect return on asset of selected firms in Nigeria?

1.5 Statement of Hypotheses

The following hypotheses guided the study :

1. Firm size has no significant effect on return on asset of selected firms in Nigeria.
2. Profit after tax has no significant effect on return on asset of selected firms in Nigeria.

REVIEW OF RELATED LITERATURE

2.1 Conceptual Framework

2.1.1 Overview of Firm's Growth Indicators

The financial and non financial characteristics including firm size, value, profitability, structure make up the growth indicators. The firms growth indicators were measured using the following proxies:

2.1.2 Firm Size

Firm size is defined as the value of the asset which the company has at any particular time. According to Frank,(2013) the proxy for firm size is total asset. Firm size is one of the most influential characteristics in organizational studies, Chen and Hambrick (2002). Mintzberg (2003) provide a summary and overview of the importance of firm size. Firm size has also been shown to be related to industry- sunk costs, concentration, vertical integration and overall industry profitability (Dean et al., 2010). Larger life insurance companies are more likely to have more layers of management, greater number of departments, increased specialization of skills and functions, greater centralization and greater bureaucracy than smaller life insurance companies (Daft, 2011).

2.1.3 Profit After Tax

After-tax profit margin is a financial performance ratio, calculated by dividing net profit after taxes by revenue. A company's after-tax profit margin is important because it tells investors the percentage of money a company actually earns per dollar of revenue. For example, if someone owns a store and his net profit or net income after taxes is \$100,000, and his net sales are \$200,000, he has a 50% profit margin after taxes (Farris, 2010).

It is also referred to as net profit is a measure of the profitability of a venture after accounting for all costs. It is the actual profit, and includes the operating expenses that are excluded from gross profit. In a survey of nearly 200 senior marketing managers, 91% responded that they found the net profit metric very useful. In accounting, net profit is equal to the gross profit minus overheads and interest payable for a given time period (usually, the accounting period).

A common synonym for net profit when discussing financial statements (which include a balance sheet and an income statement) is the bottom line. This term results from the traditional appearance of an income statement which shows all allocated revenues and expenses over a specified time period with the resulting summation on the bottom line of the report.

2.1.4 Financial Performance

The business dictionary financial performance involves measuring the results of a firm's policies and operations in monetary terms. These results are reflected in the firms return on investment, return on assets and value added. Turyahebya (2013) submits that financial performance as the ability to operate efficiently, profitably, survive,

grow and react to the environmental opportunities and threats. Corporate profit planning remains one of the most difficult and time consuming aspects of financial management because of the many variables involved in the decision which are often outside the control of the company. It is even more difficult if the company is operating in a highly competitive economic environment. A business unit can only grow focusing on its inner strengths to exploit the opportunities in the market.

Corporate profitability may be improved through ratio analysis, breakeven analysis, marginal analysis, cost control or through financial control. It is therefore necessary to mention at this juncture that whether a bank is planning for profit or taking steps to improve its profitability, it must ensure that it has adequate liquidity to transact business and finance operations. If the plan is to improve or increase profitability by increasing the income level, the bank must be able to determine the financing needs for the new income level (Ibe, 2013).

2.1.5 Return on Assets (ROA) as a Measure of Financial Performance:

Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage, Haniffa and Huduib (2006).

2.2 Theoretical Framework

We present two important growth theories to support this study, namely, Growth of the Fitter theory (Alchain, 1950) and Learning-By-Doing Theory (Penrose, 1959).

2.2.1 Growth of the Fitter Theory

This is the anchor of this study, because it is only profitable firms that can survive in the market and add value to the stakeholders in the long run while unprofitable firms die off and exist the market.

Firm growth and profitability have drawn a great deal of attention in the literature. Growth of the fitter theory was propounded by Alchain (1950). According to his theory, fitness is depicted by the firm profit, and the profitable firms grow and survive in the market while the other firms exist due to poor performance (Kouser et al., 2012). Alchain (1950) theoretical study argued that fitter firms grow and survive, but less vigorous firms lose their market share and exist through the evolutionary selection mechanism. Thus, if profit rates reflect the degree of fitness, it is possible to predict that profitable firms will grow (Jang and park, 2011). Delmar, Davidson and Gartner, (2003), suggests that more profitable firms may have higher potential to grow, since they have already shown a greater fit with the environment and may be able to fund future competitive actions with their own cash flow.

Profitability limits the risk related to acquiring and relying on external resources of financing but also displays a satisfactory level of market demand.

2.2.2 Learning-By-Doing Theory

This theory is attributed to Penrose in (1959), she states that firm growth is led an internal momentum generated by learning-by-doing. According to her, Managers functions that initially posed problems because of their relative unfamiliarity soon become reutilized. As managers gain experience, their administrative tasks require less attention and less energy. As a result, managerial resources are continually being released. This excess managerial talent can that be channeled to value-creating growth projects). Firms are faced with strong incentives to grow, because while "the knowledge possessed by a firm's personnel tends to increase automatically with experience, there is challenge to take full advantage of this valuable firm-specific knowledge. It takes time and effort to successfully integrate new managerial resources within the firm, but once this is done these new recruits will be able to execute managerial tasks and, in turn, train managers themselves. In this way, a firm will grow in order to create value from its unused resources, which in turn will create new resources. Growth in any period is nonetheless limited by the amount of available managerial attention. Managers who spend too much time focusing on the firm expansion divert their attention from operating efficiency. As a result, above a certain point corresponding to what we might call an 'optimal growth rate' (Slater, 1980), increases in growth will lead to higher operating costs. Although 'economies of growth' provide incentives for firm to grow, fast-growing firms will have higher operating costs than their slower-growing counterparts. This latter proposition is commonly known as the 'Penrose effect'

Another key concept in Penrose's theory of firm growth is that firms are composed of idiosyncratic configuration 'resources'. These resources can play a role in ensuring durable competitive advantage if they are valuable, rare, inimitable and non-substitutable (Eisenhardt and Martin, 2000). Examples of resources are brand names, in-house knowledge of technology and employment of skilled personnel, trade contracts, machinery and efficient procedure. A firm can decide upon the direction of a growth project by examining the strength and weakness of its existing resources base. Economic of growth may emerge from exploiting the strengths associated with the unique collection of productive opportunities available to each firm. The individual and interdependent nature of these resources can also be seen to add impetus to a firm's growth (Coad, 2006). In fast-changing markets, a firm's competitive advantage may erode if it relies too heavily on certain specific resources. In such circumstances, a firm's performance depends on its abilities to create or release resources and to reconfigure

their resource portfolio. These abilities are known as dynamic (Eisenhardt and Martin, 2000).

2.3 Empirical Review

2.3.1. Firms' Size and Operating Performance

Becker, Kaen, Eteban and Bauman (2010) examined the effect of firm size on firm profitability in the United States of America (USA) manufacturing sector. Total assets, total sales and number of employees were used as proxies for companies' size while net profit margin was used as proxy for profitability. Data of 1987 to 2002 was collected from the USA manufacturing companies listed on the stock exchange. Simple regression analysis was used to analyze the collected data. Result reveals a negative and significant relationship between the total assets, total sales, number of employees of the firms and their profitability.

Gaur (2011) examined the influence of different variables, especially the age variable on operating profit and return and net worth of firms operating in India. Data were collected from 57 business group of companies of Indian nonmetallurgical mineral products industries for the 10-years period. Regression analysis was employed to analyze the collected data. The age variable didn't prove to be statistically significant.

Banchuenvijit (2012), conducted a study to ascertain the factors effecting performances of the firms' operating in Vietnam. A sample was selected from companies in Vietnam stock exchange while simple regression analysis was used to analyze the collected data. Result shows that a positive relation exists between profitability of the firms. Result also shows that a negative relationship between number of employees and profitability.

Sidra and Attiya (2013), conducted a study on Determinants of financial performance of a firm: Case of Pakistani stock market. This work examines the possible association between financial performance of the firm and economic indicators, corporate governance, ownership structure, capital structure, and risk management. The present study examines the performance of firms in terms of profitability and its association with multiple determinants for 60 Pakistani corporate firms listed in Karachi stock exchange for the period of 2007 to 2011 and attempts to explain the observed behavior with the help of fixed effect model. The results consistently support the potential association between firm's financial performance and economic indicators, corporate governance, ownership structure, and capital structure although the intensity of relationship differs across different measures of performance. We find evidence in support of the hypotheses that a positive association exists between corporate governance, and risk management and performance while mixed results are observed for other variables.

Selahattin and Aynur (2014) conducted a study on Equity Returns, Firm-Specific Characteristics and Sector Rotation: Evidence from Turkey. The study examines the firm-specific characteristics that effect on equity returns depending on sector rotation scheme throughout four financial cycle stages for an important emerging market, Turkey. For this purpose, using panel data for twenty-five non-financial equities selected from ISE-100 companies and twenty-six firm-specific characteristics in 2005Q1-2011Q1 it is analysed empirically whether firm-specific factors that effect on equity returns differ among equity groups classified by sector rotation scheme throughout financial cycle stages. The firm-specific characteristics have been reduced in five factor indexes which labelled liquidity, profitability, efficiency, growth, and valuation using factor analysis. We generated four dummy variables to classified equities using sector rotation scheme throughout financial cycle: "early expansion", "late expansion", "early recession", and "late recession". Panel regressions, with and without dummy variables, have been estimated using random coefficient model. In the full sample model, equity returns have been explained by only market return. In the with dummy variables model, equity returns of early and late recession equity groups explained by only market returns. Besides, in the early expansion and the late expansion groups, valuation factor is an important determinant of equity returns in addition to market return. Our finding shows that the factors that effect on equity returns differ among their belonging industries' sensitivity to business cycle.

Robert, Mohamed and Onesmus (2015) explored the effect of corporate size on profitability and market value of listed firms in Kenya. Data for companies which were active in the Nairobi stock Exchange (NSE) between 2010 to 2014 were used. Panel correlation and multiple regression methods were used in the empirical estimations. Result indicates that there is a positive significant relationship between firm size and profitability, whereas firm size insignificantly predicts profitability. In addition, the result shows that corporate size has no statically significant impact on firm market value.

2.3.2. Profitability and Operating Performance

Mirie and Murigu (2015) conducted a study on The Determinants of Financial Performance in General Insurance Companies in Kenya. The study adopted a descriptive research design. The contribution of the general insurance industry in Kenya to the gross domestic product is at 2.08%. This is low and hence the need to establish factors that can influence improved performance of some of the key players – the general insurance companies. The study was therefore to establish the factors that affect the profitability of general insurers in Kenya. The study employed multiple linear regression, with return on assets as the dependent variable, and considered all the

general insurance companies in Kenya for the period 2009-2012. Profitability was positively related to leverage, equity capital, management competence index and negatively related to size and ownership structure. The study did not find a relationship between performance and retention ratio, liquidity, underwriting risk and age.

Ibrahim and Hussaini (2015) Conducted a study on Firms' Specific Characteristics and Stock Market Returns (Evidence from Listed Food and beverages Firms in Nigeria). The data for the study was purely from secondary sources obtained from the annual reports of the sampled firms as well as NSE fact book. Data was analyzed using several options of multiple panel data regression. But the most robust of all is OLS regression as suggested by 'Breusch and Pagan Lagrangian Multiplier Test for Random Effect'. The study adopted both correlation and ex-post facto research design. Because of the mix of opinion in the literature, the mix of empirical findings, and the limited empirical works on the relationship between firms' specific characteristics and Stock Market Returns particularly with reference to listed food and beverages firms in Nigeria, it is not out of place to conduct further research on this area to ascertain position. Hence, the study investigated the impact of certain firms' attributes namely: Market Capitalization, Debt-to-Equity Financing and Earnings per Share on Stock Market Returns of listed food and beverages firms in Nigeria for the period 2007-2013. The population comprises all the twenty-one (21) food and beverages firms listed on the Nigerian Stock Exchange (NSE) December, 2013. Out of which nine (9) firms constitute the sample of the study. The findings revealed that Market Capitalization has a significant negative impact on Stock Market Returns of listed food and beverages firms in Nigeria; while the impact of Debt-to-Equity Financing and Earnings per Share on Stock Market Returns are found to be positive and statistically significant.

Osunsan, Nowak, Mabonga, Pule, Kibiroge, and Baliruno (2015) examined the effect of firm age on the performance of firm's operation in Kampala, Uganda using both financial (net profit before tax) and nonfinancial (operational) performance indicators. Data were collected from a sample of 409 firms. Two hypotheses were formulated for the study, namely: (i) There is a significant difference between firm age and the level of performance (ii) There is a significant position relationship between firm age and performance. ANOVA and regression analysis were used to test the hypothesis. Both hypotheses were accepted after the analysis implying that firm age has a strong positive relationship on firm performance. The study also found that both financial and non-financial indicators could be used as effective measures of performance suggestion was made that emphasis should not only be placed on starting up, but also on the sustainability and longevity of the firms that are operational in Kampala, Uganda.

Rafiq, Salim and Smyth (2015) examined the impact of research and development (R&D) on the profitability and sales of mining firms, in China and United States (US) and the moderating effect of firm age. Panel data were obtained from a combined 168 major US and Chinese mining firms from 2009 to 2013. Coarsened Exact Matching (CEM) method was used in analyzing the collected data. The result suggests that R&D activities play a significant role in increasing sales and generating profits for both US and Chinese mining firms. On average, a firm engaging in R&D activities earns 4% to 11% higher sales and generates 4% to 13% more profits than firms that do not engage in R&D activities. Result also shows that R&D is negatively related to profit and sales in the relatively younger Chinese mining firms. Explanation was offered that the average age of Chinese mining firms much lower than US mining firms, Chinese mining firms suffer from the liability of newness. Consistent with this explanation, it was observed that, in the mining industry, firm age moderates the relationship between R&D activities and financial performance. In general, a comparatively mature R&D active firm earns 4.4% more profit and generates 7.2% more sales than a younger non-innovative firm. We find that the turning point at which R&D activities switch from making a negative, contribution to profit and sales is 37 years, respectively.

Leite and Carvalhal (2016) investigated the relationship between firm ages, value, and performance and to verify if age affect their corporate governance in Brazil. Data were obtained from 2002 to 2009. Return on Asset (ROA) and the price – to –Book (P/B) were used as proxies for firm performance and value, respectively. These two variables were tested separately with the objective to confirm the influence of aging in the performance and value of the firms. To measure the quality of governance, we used the corporate governance index (CGI) of Carvalhal and Leal (2005) and the listing on BM & FBovespa's New Market (NM). A panel regressions analysis was applied on the data collected from the 250 firms from 2002 to 2009. Result shows that older firms show higher value and better on their investments. It was also observed that older firms show better governance practices.

Chuke, Idam, Bamidele, and Sergius (2016) in their study on The Impact of Debt Structure On Firm Performance: Empirical Evidence from Nigerian Quoted Firms, provides an empirical investigation of the impact of debt structure on the performance of Nigerian quoted firms. It was conducted using 12-year annualized panel data spanning the period 2001-2012 for cross section of 43 firms from different sectorial classifications. The data were collated from the annual reports of the sampled firms and Nigeria Stock Exchange factbooks. The study employed three regression estimations (Pooled OLS, Fixed Effects and Random Effects) as a result of unobserved heterogeneity in the dataset. The outcome from the regression estimations showed that debt structure

has negative and significant impact on the performance of Nigerian quoted firms within the period under review. The study concludes that debt structure contribute negatively to performance of Nigerian quoted firms; thereby agree with pecking order theory.

Solakoglu (2016) in his research on the role of firm characteristics on the relationship between gender diversity and firm performance. The purpose of this paper is to understand the effect of gender diversity on firm performance and evaluate how that relationship is influenced by some firm-specific factors for firms in an emerging market. The author collected firm level financial data and firm level characteristics for the firms listed in BIST100 index of Borsa Istanbul for the period between 2002 and 2006. Due to endogeneity of gender diversity and firm performance, the authors utilize unbalanced panel data with 2SLS specification. To observe the sensitivity of results across measures of performance, three measures of performance, two accounting-based and one market-based, are utilized. The study finds some weak evidence that gender diversity impacts firm performance. In particular, the findings imply significant association between gender diversity and firm performance for firms that are targeting local markets, for firms in the financial sector and for firms that are family or block-owned.

Amahalu and Ezechukwu (2017) conducted a study on the effect of firm characteristics on financial performance of quoted deposit money banks in Nigeria. This study assesses the extent at which firm characteristics affects financial performance of quoted deposit money banks in Nigeria from 2010-2015. Three hypotheses were formulated in line with the objective of the study. Ex-post facto research design and time-series data were adopted and the data for the study were obtained from Fact books, annual reports and account of the quoted banks under study. Pearson coefficient of correlation and ordinary least square (OLS) were applied to test the three hypotheses formulated with aid of STATA 13 statistical software. Findings showed that firm characteristics (proxy by Size) have a positive and statistically significant effect on financial performance (proxy by Return on Asset, Return on Equity and Return on Capital Employed) at 5% significant level. Based on these findings, the study recommends among others that banks should adequately manage how they reinvest their resource so as to prevent any form of mismanagement of resource that can guarantee their existence in business.

Pervan, pervan and curak (2017) examined the influence of age on firm performance from Croatian food industry. Data were collected from a sample of 956 firms in the Croatian food industry during the 2005-2014 periods. Data were collected from the AMADEUS data base compiled by Burea van Dijk Since AMADEUS provides information at the 4-digit (NACE Rev.2) level, the sample was created by including all firms recorded in any 4-digit (NACE Rev.2) food processing industry (categories between NACE -1011 and NACE 1099) Dynamic panel analysis was applied on the collected data. The result shows that age negatively affects firm's performance. As firms get older, benefits of their accumulated knowledge in all crucial aspects of business (technology, supply, channels, customer's relations, human capital and financing costs) become overcome with their inertial, inflexibility and osseous by accumulated rules, routines and organizational structure. Beside firm's age, other firm's special factors influencing profitability of the firms operating in Croatian food industry including size, liquidity and solvency.

METHODOLOGY

3.1 Research Design

The project is an ex post facto research which provides a systematic and empirical solution to research problems, by using data which are already in existence.

3.2 Population of the Study

The population of the study is the oil and gas sector on the floor of the Nigeria Stock Exchange.

3.3 Sample Size of the Study

Three oil and gas firms were sampled for the study. They are: Total Nig. Plc, and Oando Plc.

3.4 Sampling Techniques

The researcher chose random sampling techniques because it guarantees an equal opportunity for all concerned companies to be selected.

3.5 Nature and Sources of Data

The study used secondary data for analysis on the firm characteristics and financial performance of oil and gas firms in Nigeria, which were extracted from the annual reports and accounts of the selected firms from the period of 2007 – 2016.

3.6 Description of Research Variables

The independent variables of the study are sales growth, firm size and leverage. The dependent variable is

financial performance proxied by return on assets (ROA)

3.6.2 Firm Size (SIZE)

Firm size is the size for a company in a given industry at a given time which results in the lowest production costs per unit of output.

3.6.4 Financial Performance (proxied by ROA)

Financial performance is proxied by return on assets. Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings (profit after tax) by its total assets, ROA is displayed as a percentage. It is calculated thus:

$$\text{Returnonassets} = \frac{\text{NetProfitaftertaxes}}{\text{Totalassets}}$$

3.7 Model Specification

Multiple regression models were used to find the correlation between firm characteristics and market price of shares of manufacturing companies; The base models took the following form:

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \mu_{it}$$

Where:

Y_{it} is the dependent variable.

β_0 is the intercept.

β_1 is the slope

X_{it} is the independent variable.

μ_{it} are the error terms or variations that cannot be explained by the above model.

i is the number of firms and

t is the number of time periods.

Applying the model

$$\text{ROA}_{it} = \beta_0 + \beta_1 \text{FSZ}_{it} + \beta_2 \text{PAT}_{it} + \mu_{it}$$

Where: ROA = return on asset
 FSZ = Firm size
 PAT = Profit after tax

3.8 Tools for Data Interpretations

Results were be interpreted using probability (p-value) and R^2 (coefficient of determination)

Decision Rule: Reject the null hypothesis if the p-value is ≤ 0.05 (i.e. at 5% significance level), if not accept null hypothesis and accept the alternate hypothesis.

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation and Analysis

Reinstatement of Hypotheses

4.1.1 Using Pool Data Analysis

Reinstatement of Hypotheses

Hypothesis One

Ho: Selected Companies Firm Size has no significant effect on their ROA.

Hi: Selected Companies Firm Size has a significant effect on their ROA.

Decision Rule: Accept Ho if insignificant at 5% level of significance otherwise reject.

Table 4.1 Regression Results of the effect of Selected Companies Firm Size on their ROA.

R ²	R ² Adjusted	Standard Error	Coefficient	Probability
0.014957714	-0.034294401	1.944317961	-0.20608191	0.587678264

Source: Researcher's Computations, 2017

Table 4.1 shows the effect of Selected Companies Firm Size on their ROA. The results in Table 4.9 indicate R^2 as 0.014957714. This means that 14% of the variations in Selected Companies Firm Size was caused by changes which produced their PAT. This means that the remaining 86% can be caused by other variables that are not discussed in this study. Analysis also shows that Beta coefficient of -0.20608191. This means that a naira increase in the budget will cause a decrease of -0.20608191 in Selected Companies' ROA. The study also shows a p-value of 0.587678264. This means that the change in the Selected Companies Firm Size has negative and insignificant effect on its ROA.

Decision: Accept Ho and reject Hi. This means that Selected Companies Firm Size has negative and insignificant effect on its ROA at 5% at level of significance.

Hypothesis Two

Ho: Selected Companies Profit after Tax ratio has no significant effect on their ROA.

Hi: Selected Companies Profit after Tax has a significant effect on their ROA.

Decision Rule: Accept Ho if insignificant at 5% level of significance otherwise reject.

Table 4.2 Regression Results of the effect of Selected Companies PAT on their ROA.

R ²	R ² Adjusted	Standard Error	Coefficient	Probability
0.000804718	-0.049155046	1.958236036	-0.000000001	0.900275276

Source: Researcher's Computations, 2017

Table 4.2 shows the effect of Selected Companies PAT on their ROA. The results in Table 4.2 indicate R² as 0.000804718. This means that 80% of the variations in Selected Companies PAT was caused by changes which produced their ROA. This means that the remaining 20% can be caused by other variables that are not discussed in this study. Analysis also shows that Beta coefficient of -0.000000001. This means that a naira increase in the budget will cause a decrease of -0.000000001 in Selected Companies ROA. The study also shows a p-value of 0.900275276. This means that the change in the Selected Companies PAT has negative and insignificant effect on its ROA.

Decision: Accept Ho and reject Hi. This means that Selected Companies PAT has a negative and insignificant effect on its ROA at 5% at level of significance.

4.2 Discussion of Results

Result from the test of hypothesis one revealed that firm size has negative and insignificant effect on its return on asset. This finding is in line with those of Mirie and Murigu (2015) and Tahir, Sabir, Alam and Ismail (2013). Result from test of hypothesis four indicates that Companies profit after tax has a negative and insignificant effect on return on asset. Chuke, Idam, Bamidele, and Sergius (2016) has similar results in their study, they found that profit margin is directly proportional to return on investment.

5.1 Summary of Findings

Following the analyses, the following findings are made:

- (i) Firm size has negative and insignificant effect on return on asset of oil and gas firms in Nigeria
- (ii) Profit after tax has a negative and insignificant effect on return on of asset oil and gas firms in Nigeria

5.2 Conclusion

No doubt, firm characteristics, as shown in numerous existing researches have effect on firm performance. This is even moreso when financial performance is discussed. These previous assertions have been culminated by this present study. It has been established in this study that firm characteristics of size, leverage, sales and profit after tax have negative and insignificant effect on return on assets of oil and gas firms. Therefore, this study submits that firm characteristics have negative and insignificant effect on firm performance.

5.3 Recommendations

Consequent upon the findings of this study, the following recommendations were made:

- (1) Oil and gas firms should optimally take advantage of their size to better their chances of profitability. Their assets must be prudently use is any positive gain is to be derived from their huge size.
- (2) Oil and gas firms should trade cautiously in managing an equilibrium between their liabilities and assets.
- (3) Profits should be managed properly so as to increase returns on assets and subsequently to shareholders.

5.4 Suggestions for Further Studies

The study suggests that future researchers can:

- (i) Adopt other methodologies not used in the present study
- (ii) Expand their horizon by doing a cross-country study comparing Nigeria's case with others

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