BOWEN UNIVERSITY
(of the Nigerian Baptist Convention)

2021 INTERNATIONAL CONFERENCE ON ACCOUNTING AND FINANCE (ICAF)

ACCOUNTING AND FINANCE PROGRAMME
COLLEGE OF MANAGEMENT AND SOCIAL SCIENCES (COMSS)

BOWEN UNIVERSITY, IWO, OSUN STATE, NIGERIA

29 NOVEMBER – 1 DECEMBER 2021

THEME

ACCOUNTING AND FINANCE PROFESSION – FOSTERING SUSTAINABILITY INITIATIVES

PUBLISHED IN THE

INTERNATIONAL CONFERENCE ON ACCOUNTING AND FINANCE PROCEEDING

(ISSN: 2814-0257)

VOLUME 2

FIRMS' SPECIFIC ATTRIBUTES AND FINANCIAL PERFORMANCE OF QUOTED MANUFACTURING COMPANIES IN NIGERIA

Sadiq Raji[1,3], Bojuwon Mustapha[2], & Chimuaya Osuagwu[3]

[1]Bowen University, Iwo, Osun State. [2]Federal University, Oye-Ekiti, Ekiti State. [3]Fountain University, Osogbo, Osun State.

ABSTRACT

This study examined the effect firms' specific attributes and performance on quoted manufacturing companies in Nigeria. The study covered a period of ten (10) years (2010 - 2019). Data utilized were obtained from the audited annual reports of quoted manufacturing companies for a period of 10 years. The variables used for specific attributed are firm size, firm age, leverage, and asset turnover while the performance is measured with net profit margin. The sample size in this study consisted of eleven (11) quoted manufacturing companies selected from the Nigerian Exchange Group (NGX). The area covered by this study is the consumer goods sector only. The study used panel data analysis (descriptive, correlation and multiple regressions) with the aid of E-views 9. The results revealed that firms' size and firms' age had insignificant positive effect on financial performance of manufacturing companies quoted on Nigeria Stock Exchange. The study also found that leverage and asset turnover had significant negative effect on financial performance of quoted manufacturing companies on NGX. The study recommends that quoted manufacturing companies in Nigeria should pay attention to firms' size (FSZE) since it plays a vital role in the profitability, effectiveness, and efficiency of the companies.

Keywords: Specific Attributes, Performance, Leverage, Firms Size

INTRODUCTION

Firm attributes are those variables that affect the firm's decisions both internally and externally. They refer to ownership structure internally and externally, levels of diversification, financial leverage, profitability and liquidity (Lang & Lundholm, 2013). Firm characteristics have become a focus of attention in the corporate world, research, and investment. The specific area of concern has been to establish if firm characteristics have an impact on firms' performance. Firms can be distinguished from one another on the basis of different financial and non-financial characteristics including firm size, value, profitability, structure, leverage, current ratio, capital, firm age, dividend, market share, off balance sheet activities, operating expenses. The following variables would be considered for the study and they are firm size, firm age, leverage and efficiency as measures of firm attributes.

Company performance describes how individuals in the company try to achieve a goal and illustrates the magnitude of the results in a process that has been achieved compared with the company's goal. The existence of performance is observed in different approaches of the organization which includes financial performance, product market performance, and operational performance. Financial performance serves as a determinant of an organization's income, profits, increase in value as evidenced by the appreciation in the entity's worthiness (Asimakopoulos, Samitas & Papadogonas, 2009). Financial performance of institutions depends upon the strengths, weaknesses, opportunities, and threats they are facing.

The attributes of a firm can influence its financial performance because bigger firms are likely to generate larger returns on assets than smaller firms. New firms are perceived unable to achieve economies of scale and they rarely have the sufficient managerial resources and expertise due to the risk rate that the firm may fall with time. The leverage of a firm may weaken its performance because of the amount of debt used to finance a firm's assets and, it is very difficult to have a sustained asset turnover an improving level of profitability (Dioha, Mohammed, & Okpanachi,

2018), It should be noted that asset turnover is an indicator of the efficiency, conversely, if a company has low asset turnover ratio, it indicates it is not efficiently using its assets to generate sales Sutrisno (2012).

LITERATURE REVIEW

Firms' Attributes

Firms' attributes refer to the characteristics which a particular firm possesses that define its activities. Firm characteristics are those variables that relatively affect the firm's decision both internally and externally (Shehu 2012). Firms' attributes are conceptualized differently by various studies depending on the criteria used to define it. However, most studies seem to agree with the position that firm characteristics are related with firm resources and organizational objectives (Mgeni & Nayak 2016). Firm characteristics include firm size, age of the firm, profitability, ownership structure, board characteristics industry type, sales growth, asset growth, turnover, environmental uncertainty, market environment, dividend pay-out, liquidity, access to capital markets, growth opportunities. leverage and capital intensity (Gachoka, Aduda, Kaijage & Okiro 2018).

Firms' Size

The size of a firm is considered an important variable in determining the firm's operational strength. According to Kabir and Hartini (2015), there are more opportunities for firms that grow in size, to operate in bigger segment environment in both business and geographical regards. Firm size has also been shown to be related to industry sunk costs, concentration, vertical integration and overall industry profitability as larger firms 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 firms (Kaguri 2013).

Firms' Age

Age is deemed to open new windows of research opportunity in the field of diversification, and especially in well-known topics like integration/specialization in horizontally- or vertically-related industries, as being new in a given industry can also be moderated with age. For instance, in some cases, going green by diversification could in the end be on a par with born-to-be-green, provided that age can help catching up (Leoncini 2017).

Leverage

Firm's leverage is the degree to which a company uses fixed-income securities, such as debt and preferred equity. With a high degree of financial leverage come high interest payments. It refers to the proportion of debt to equity in the capital structure of a firm (Omondi and Muturi, 2013). It strives to measure what portion of the total assets is financed by debt funds. Leverage ratios are used to measure business and financial risks of a firm (Okwoli and Kpelai, 2006).

Asset turnover

Asset turnover is a ratio that measures how all assets owned by a company are operated in supporting company sales (Sitanggang, 2013). Sutrisno (2012) describes the total assets turnover is a measure of the effectiveness of utilization of asset in generating sales. The larger the turnover assets then better effective companies in managing their assets to maximize sales. Meanwhile Prihadi (2012) explained that the total assets turnover ratio is to know the effectiveness of the use of the company's operating assets in generating sales, when the company produces the same asset sales more a little mean the company is increasingly effective, because it requires a lower investment level, where more effective company uses its assets, the less asset that needs to exist in the company.

Financial Performance

Financial performance represents the achievement of any organization through its financial objectives. It helps to measure the outcomes that have been achieved from the firm's policies and operations which have been expressed in monetary terms (Verma, 2018). Financial performance helps to shows the firms' achievements and financial health over period under consideration. It shows entity ability to carried out maximum utilization of its scares resources to maximize the shareholder's wealth (Naz 2016). According to Naz &Ijaz (2016) financial performance is an extent to which a company's financial health over a period is measured. In other word, it is a financial action used to generate higher sales, profitability and worth of a business entity for its shareholders through managing its current and non-current assets, financial liability, equity, revenue and expenses. Its main purpose is to provide complete to the point information to shareholders and stakeholders to encourage them in making decisions. It can be used to evaluate similar companies from the same industry or to compare industries in aggregation.

Theoretical Review

Agency theory: Agency theory states that management and owners have different interests (Jensen & Meckling, 1976 as cited in Yuan D, 2008). According to this theory agency costs arise from conflicts of interest between shareholders and managers of the company. Agency cost is defined as the sum of monitoring costs incurred by the principal, bonding cost incurred by the agent, and residual loss. Lower agency costs are associated with better performances and thus higher firm values, all other things being equal. To achieve this goal, it is important to see the factors that have been considered in previous studies. Previous studies in their respective studies have used agency theory, among them are (Yuan, 2008); (Alamro & Al-soub,2012), (Bano, Scholar, Azeem &Scholar, 2012).

Resource-Based Theory: This theory was propounded by Wernerfelt in year 1984. Pearce and Robinson (2011) define the resource-based theory as a process of examining separate combination of assets, skills, intangibles, and capabilities through analyzing and identifying a firm's strategic advantages. This theory considered internal firm characteristics and its effect on performance of firms. Resource based theory views the organization as a collection of resources which are pooled together to create organizational Strategic advantages to earn above average profitability (Grant, 1991).

Empirical Review

Musa and Ibrahim (2020) examined the effect of firm's age, size, and growth on its profitability: evidence from Jordan based on the financial data of twenty-two (22) Jordanian insurance firms that are registered in the Amman Security Exchange (ASE) during the period (2008-2017). Simple regression analysis was used to test the study's hypotheses. The study shows that there is an insignificant effect of the insurance firm's age, size, and growth on its profitability.

Bist Mali, Sabita Puri, Sachyam, Kayastha and Bhattarai (2017) examined the impact of firm characteristics on financial performance in Nepal. They studied 18 Nepalese insurance companies from 2008 to 2016. Multiple regressions were used to analyze the data. The regression analysis showed that the coefficients of leverage and premium growth were positive and significant at 1 percent level. However, the coefficients of diversification, size, and liquidity and claim payments were negative and insignificant.

Kartikasa and Merianti (2016) analyzed the effect of leverage and the size of a company on its profitability. Data were obtained from the financial statements of 100 qualified manufacturing companies listed in Indonesia Stock Exchange in the period of 2009-2014. Panel data regression analysis was used in this study. The study found that the debt ratio had a significant positive effect on profitability

Kahihu, Wachira and Stephen (2020) investigated on Market risk, Firms' size and financial performance, Reality or illusion in microfinance institution in Kenya for five years (2014-2018). The study uses multiple regression analysis (panel) to analyze data collected. The results indicated that firm's size has a significant moderating effect on the relationship between market risk and financial performance of microfinance institutions.

Too and Simiyu (2018) evaluate the influence of firm's characteristic on financial performance of insurance firms in Kenya. The study used a descriptive survey research design. The target population was all the 47 General insurance companies in Kenya. Secondary panel data was obtained from the financial statements of insurance companies in Kenya. The study used statistics which included analysis of variance, correlation analysis and multivariate regression analysis. The study found that among firm characteristics, firm age and firm size has the significant influence on the financial performance of insurance companies in Kenya. The study found that firm size has an inverse influence on the financial performance of insurance companies while firm ownership has no significant influence.

Adeleye (2020) examined the relationship between firm characteristics and earnings quality of quoted manufacturing firms in Nigeria. The study used annual data from 2011 to 2018 of six manufacturing firms. Panel data analysis was adopted, and Hausman Test was used to determine which of the appropriate method to adopt for the analysis. The study found a positive and significant relationship between firm characteristics (measured by return on asset and current ratio) and earnings quality.

Efuntade and Akinola (2020) examined the impact of firm characteristics on the financial performance of quoted manufacturing firms in Nigeria. Descriptive and cross-sectional research design were adopted to investigate the relationship between variables of firm characteristics and financial performance of quoted manufacturing firms in Nigeria over a period of 14 years. Secondary Data were obtained from annual reports of five selected quoted manufacturing firms. Panel least square regression model was used to test the formulated hypothesis. Findings showed that all the independent variables jointly and strongly have impact on the financial performance of manufacturing firms in Nigeria measured by return on assets. It was concluded the explanatory variables (Firm Age, Firm Size, Sales Growth, Liquidity and Leverage) were significantly associated with the dependent variable (Return on Asset).

Abdullahi, Martins, Duna and Ado (2019) examined the impact of firm characteristics and financial performance of consumer good firms in Nigeria. Specifically, it tests the effects of firm size, firm age and leverage on financial performance (return on equity). The study uses both financial and non-financial data from annual reports of the selected 5 listed consumer good firms in Nigeria from 2007 to 2016. The data was analyzed using descriptive statistics, Pearson correlation and multiple regressions. The result shows that the firm size has a positive relationship with financial performance, firm age also has a positive relationship with financial performance and leverage too has a positive relationship with financial performance. The study recommends a high consideration of increasing the company assets. This is because the size of the company is an important factor as it influences its competitive power. Small companies have less power than large ones; hence they may find it difficult to compete with the large firms particularly in highly competitive markets.

METHODOLOGY

The study was geared towards examining the effect of firms' specific attributes on the financial performance of selected quoted manufacturing companies in Nigeria. The study will adopt quantitative research design.

The study population consists of 177 manufacturing companies quoted on Nigerian Stock Exchange. A total of eleven (11) companies from the consumer goods sectors were selected. Considering the largeness of the population involved in this study, the researcher select a sample from the population upon which the study was conducted and generalization made based on the assumption that sample is representative of the whole population. For the purpose of this research work, convenience sampling technique is adopted to select the manufacturing companies that will serve as the sample from where the information will be sought. A total of 11 selected companies includes: Dangote Sugar Refinery Plc, Nigerian Breweries Plc, Unilever Nigeria Plc, Guinness Nigeria Plc, Nascon Allied Industries Plc, Cadbury Nig Plc, Nestle Nigeria Plc, Vitafoam Nigeria Plc, Honeywell Flour Mill Plc, Champion Brew Plc and Nig Enamelware Plc.

The Panel regression model was used to estimate the effect of the five explanatory variables.

$NPM_{it} = a + \beta_1 FSZE_{it} + \beta_2 FAGE_{it} + \beta_3 LEV_{it} + \beta_4 AST_{it+} u_{it}$

Where

$\beta_0, \beta_1, \beta_2, \beta_3, \ldots\ldots\ldots\ldots \beta_5$ are parameters to be estimated with a priori expectation.

FSZE = Firm Size, FAG = Firm Age, LEV = Leverage, AST = Asset Turnover, β_0 = Constant

u = Error term, i = number of manufacturing companies, t = number of years

Variable Measurements

Table 1

VARIABLES	DESCRIPTION	MEASURE
Net Profit Margin (NPM)	This measures how much net income or profit is generated as a percentage of revenue. It is the ratio of net profits to revenues for a company or business segment. NPM is typically expressed in percentage but can also be represented in decimal form.	PBT / Turnover
Firm Size (FSZE)	This is the size of a company in a given industry at a given time which results in the lowest production costs per unit of output. It means scale or volume of operation turned out by a single firm.	Natural logarithm of total assets at the statement of financial position. Date
Firm Age (FAG)	This is the number of years of incorporation of the company even though some believe that listing age should define the age of the company.	Logarithm of number of years in operation
Leverage (LEV)	It is an investment technique strategy of using borrowed money, specifically, the use of various financial instruments or borrowed capital to increase the potential return of an investment. It may refer to the amount of debt a firm uses to finance asset.	Total Debt / Total Assets
Asset Turnover (AST)	Asset rotation is a ratio that describes asset turnover measured by sales volume. It is a measure of the effectiveness of utilization of asset in generating sales.	Turnover / Total Asset

Sources: Author's computation (2021)

DATA PRESENTATION AND INTERPRETATION

Descriptive Statistics

The descriptive statistic has shown in the table 2 above depict a general overview of the data characteristics. The mean is measure of central location. The mean for NPM, FSZE, FAGE, LEV, and AST are 0.0861, 7.5444, 1.6540, 0.5961, and 1.2546 respectively. The mean shows the average of the value for each of the variable which is the sum of the data for each of the period divided by numbers of observations.

The median denotes the value or quantity lying at the midpoint of the frequency distribution of the observed data arranged in ascending or descending order of figures. The median results for NPM, FSZE, FAGE, LEV, and AST for the selected manufacturing companies are 0.1080, 7.6805, 1.6990, 0.5810, and 1.0142 respectively. The figure the mid-point if the data are arranged in ascending or descending order.

Maximum value shows the highest value for each sample NPM, FSZE, FAGE, LEV, and AST are 1.3150, 8.5373, 1.9868, 1.5045, and 5.9193 respectively, while the minimum value indicates the lowest value of each variable which are; -1.0804, 5.8694, 0.7782, 0.1936, and 0.4899 respectively.

The standard deviation measures the dispersion of a set of the data from its mean. It measures the absolute variability of a distribution; the higher the dispersion or variability, the greater is the standard deviation and greater will be the magnitude of the deviation of the value from their mean, a low standard deviation denotes that data are too close to the mean while a high standard deviation shows that data spread over a wide range of values. The spread of the sample series: NPM, FSZE, FAGE, LEV, and AST are 0.2476, 0.6717, 0.2445, 0.2066, and 0.8445 respectively. Standard deviation may also measure risk and uncertainty. The result shows that AST has the highest standard deviation and LEV has the lowest standard deviation.

Skewness is a measure of symmetry and asymmetry nature of random individual variable about its mean. The skewness statistic for NPM, FSZE, FAGE, LEV, and AST are: -1.2548, -0.5698, -1.6986, 1.80940, and 2.8923 respectively. This indicates the distribution falls around the mean. A positive skewness denotes that the right-hand side of the tail is longer than the left hand side while the negative skewness means the left and side is longer than the right hand side and zero skewness indicates that the left and right sides are even. The result shows that LEV and AST are positively skewed respectively while NPM, FSZE and FAGE are negatively skewed respectively.

The Kurtosis can be seen as a parameter that measures the peaked-ness of the probability distribution. In a normal distribution, if the Kurtosis coefficient is less than three, it means there is low peak while if the kurtosis coefficient is above three, it means there is high peak. Using the kurtosis value from the descriptive statistic it shows that NPM, FAGE, LEV, and AST which are; 15.7876, 6.0658, 9.2726, and 12.8880 respectively were high peaked which implies that the distribution of the series is greatly peaked relative to the normal distribution while FSZE is 2.3353 shows that kurtosis value is less than three, therefore FSZE is low peaked.

Jarque- bera test is a goodness of fit-test of whether sample data have the skewness and kurtosis matching a normal distribution. The Jarque bera statistic has a distribution with two degrees of freedom under the null hypothesis of normally distributed errors. The test is an alternative to the Q statistic for testing serial correlation. The test belongs to the class of asympototic large sample tests known as lagrange multiplier (LM) tests. When using Jarque-Bera, if probability is high than level of significant, we accept the null hypothesis, otherwise, we reject. From the analysis the jarque-bera test for NPM, FSZE, FAGE, LEV, and AST are 778.3423***, 7.9768**, 95.9767***, 240.3605***, and 601.4931*** respectively and probability value for NPM, FSZE, FAGE, LEV, and AST are; 0.0000, 0.0185, 0.0000, 0.0000, and 0.0000 respectively. This indicates that the regression residual and normally distributed.

Table 2 Descriptive Statistics Result

	NPM	FSZE	FAGE	LEV	AST
Mean	0.0861	7.5444	1.6540	0.5961	1.2546
Median	0.1080	7.6805	1.6990	0.5810	1.0142
Maximum	1.3150	8.5373	1.9868	1.5045	5.9193
Minimum	-1.0804	5.8694	0.7782	0.1936	0.4899
Std. Dev.	0.2476	0.6717	0.2445	0.2066	0.8445
Skewness	-1.2548	-0.5698	-1.6986	1.8094	2.8923
Kurtosis	15.7876	2.3353	6.0658	9.2726	12.8880
Jarque-Bera	778.3423***	7.9768**	95.9767***	240.3605***	601.4931***

Source: Author's computation, (2021)

Note: *,**,*** indicate level of significant at 10%, 5%,and 1% respectively, NPM, FSZE, FAGE, LEV, AND AST represents Net profit margin, Firms' size, Firms' age, Leverage, and asset turnover

Correlation Analysis

The table 3 represents the results of correlation analysis among the variables to evaluate the relationship that exist between firms' specific attributes and financial performance of selected quoted manufacturing companies in Nigeria. The table shows the relationship of NPM, FSZE, FAGE, LEV, and AST. The result of the study shows that NPM is positively correlated with FSZE, but negatively correlated to FAGE, LEV, and AST, FSZE is negatively correlated to FAGE, LEV and AST, FAGE is positively correlated to LEV, and AST. LEV is positively correlated to AST

Precisely, it can be noted that there is a positive relationship between firms' size and financial performance of selected quoted manufacturing companies in Nigeria. Thus, bigger firms are likely to generate larger returns on assets than smaller firms; hence, firms' size is a good determinant of financial performance. Firms' age has a negative connection with financial performance because new firms are perceived unable to achieve economies of scale and they rarely have the sufficient managerial resources and expertise due to the risk rate that the firm may fall with time compared to aged firms, so the longer a firm is the better the firm's performance. Leverage shows a negative relation with financial performance because the leverage of a firm may weaken its performance due to the amount of debt used to finance a firm's assets. In addition, asset turnover has relationship with financial performance; this implies that it is very difficult to have a sustained growth without an improving level of profitability.

Table 3 Correlation Matrix

	NPM	FSZE	FAGE	LEV	AST
NPM	1.0000				
FSZE	0.4578	1.0000			
FAGE	-0.0023	-0.0502	1.0000		
LEV	-0.5844	-0.1863	0.2075	1.0000	
AST	-0.6735	-0.5622	0.0105	0.3623	1.0000

Source: Author's computation, (2021)

Regression Analysis

This section deals with the regression result of the explained variable proxied by NPM and the explanatory variables (FSZE, FAGE, LEV & AST) of the study. The results obtained from fixed and random effect model are presented first before the Hausman specification test to decide the appropriate model from the two options possible.

Fixed Effect

From the table 4 above the model was linearly expressed using the equation

$NPM_{it} = a + \beta_1 FSZE_{it} + \beta_2 FAGE_{it} + \beta_3 LEV_{it} + \beta_4 AST_{it+} u_{it}$

Fitting the values into the model, we then have the following:

Examining the equation above, it is expressed as follows:

NPM = 0.36 - 0.09FSZE + 0.53FAGE - 0.52LEV- 0.12AST

Standard error (0.93) (0.15) (0.42) (0.08) (0.03)

From the regression result (table 4), three of the variables are statistically insignificant, except for LEV and AST which is significant at 5% level.

From the coefficient, the constant, in the model for the value of a is 0.36 which means holding all the variables (FSXE, FAGE, LEV and AST) constant, NPM equals to 0.36 and NPM will vary positively up to the tune of 0.36 when all variables are held constant. From table 4, β_1 co-efficient is -0.09, it reveals that a negative relationship exists. β_2 co-efficient is 0.53 which reveals that a positive relationship exists. β_3 co-efficient is -0.52which reveals that a negative relationship exists. β_4 co-efficient is -0.12 which reveals that a negative also relationship exist.

Under the T- stat, to find of the variables are statistically significant for each variable, we need to find $t_{(\alpha/2,\ n-k)}$ and we tend to reject the hypothesis.

If only the t-stat > t(0.05/2, n-k)

To calculate for the t(0.05/2, n-k) = t(0.05/2, 110-5)

$$t(0.025,\ 105) = 1.980$$

Assume βs zero for all slopes, then, the t-tab of 1.980 would be used to make decision for each variable.

Under the F-stat, it is used to test for joint hypothesis. H_0 is rejected if F-stat > F_{cal} ($F\alpha_{(k-1,\ n-k)}$ nut if not, we do not reject the null hypothesis. In our regression, F-statistic is 15.2836 and F-cal is $F_{0.05(5-1,\ 110-5)}$ when α =5% (0.05), k=5 (number of parameter) and n=110 (number of observation).

$$F_{0.05(4,\ 105)}$$

Using the *f* distribution table the result derived is 2.45.

Thus, since the F-stat > $F_{0.05(4,\ 105)}$ (15.2836 > 2.45) we tend to reject the null hypothesis and conclude the NPM depends on FSZE, FAGE, LEV and AST for the selected manufacturing companies and given sample since the regression explain significant amount of the model.

Using the probability value of F-stat (P-value (F-stat)) to test for the joint hypothesis, which states that reject null hypothesis if the P-value (F-stat) < level of significance. In our regression result P-value is 0.000000 which is less than 5% level of significance (0.000000 < 0.05), we reject the null hypothesis. It indicates that there is joint effect on the dependent variables

The R-squared gives statistical information about the goodness of fit of information. An R-squared of 1 indicates the regression is perfect in our regression result; R-squared is 0.6925, which indicates that about 69.25% of variation in dependent variable is explained by the explanatory variable. This indicates a good fit since 30.75% (100% - 69.25%) of the variables are attributable to the error term and the closer the R-squared to 1 the better the regression model.

Adjusted R-squared is simply the modification of R-squared and it adjusts the explanatory variable in term of the model, which tends to increase only if variables improve the model more than expected. The adjusted R-squared is 0.6472 (64.72%) as depicted in Table 4.3

The Durbin-Watson test is used to test the autocorrelation. It tests for both the upper and lower of the observation. In the result, the Durbin-Watson is 1.1438, which is lower to the higher and lower DW of 5% level of significance. The values of the lower and upper are 1.571 and 1,780 respectively. This indicates that there is no presence of auto-correlation in the variables used for the study because it does not fall between the upper and lower value of the DW table. The study therefore concludes its appropriate decision making.

Table 4 Fixed Effect Result

Dependent Variable: NPM Method: Panel Least Squared				
Variable	Coefficient	Std. Error	t-Statistic	P-value
C	0.3646	0.9315	0.3914	0.6964
FSZE	-0.0936	0.1566	-0.5973	0.5517
FAGE	0.5337	0.4165	1.2812	0.2032
LEV	-0.5206	0.0824	-6.3191***	0.0000
AST	-0.1155	0.0325	-3.5542***	0.0006
R-squared	0.6925			
Adjusted R-squared	0.6472			
F-statistic	15.2836***			
Durbin-Watson stat	1.1438			

Source: Author's computation (2021)

Random Effect

From the table 5 above the model was linearly expressed using the equation

$NPM_{it} = a + \beta_1 FSZE_{it} + \beta_2 FAGE_{it} + \beta_3 LEV_{it} + \beta_4 AST_{it+} u_{it}$

Fitting the values into the model, we then have the following:

Examining the above equation model using cross-sectional fixed method, the result of the regression model is linearly expressed as follows:

NPM = -0.09 + 0.06FSZE + 0.12FAGE - 0.51LEV- 0.11AST

Standard error (0.37) (0.04) (0.11) (0.08) (0.03)

From the regression result (table 4.4), three of the variables are statistically insignificant, except for LEV and AST (according to the p- value of the regression) at 5% level of significance.

From the coefficient, the constant, in the model for the value of a is -0.09 which means holding all the variables (FSXE, FAGE, LEV and AST) constant, NPM equals to 0.09 and NPM will vary positively up to the tune of -0.09 when all variables are held constant. From the equation β_1 co-efficient is 0.06, it reveals that a positive relationship exists. B_2 co-efficient is 0.12 which also reveals that a positive relationship exists. B_3 co-efficient is -0.51which reveals that a negative relationship exists. B_4 co-efficient is -0.11 which reveals that a negative also relationship exist.

Under the T- stat, to find of the variables are statistically significant for each variable, we need to find $t_{(a/2, n-k)}$ and we tend to reject the hypothesis.

If only the t-stat > t(0.05/2, n-k)

To calculate for the t(0.05/2, n-k) = t(0.05/2, 110-5)

t(0.025, 105) = 1.980

Assume βs zero for all slopes, then, the t-tab of 1.980 would be used to make decision for each variable.

Under the F-stat, it is used to test for joint hypothesis. H_0 is rejected if F-stat > F_{cal} ($F\alpha_{(k-1,\ n-k)}$ nut if not, we do not reject the null hypothesis. In our regression, F-statistic is 29.4940 and F-cal is $F_{0.05(5-1,\ 110-5)}$ when α =5%(0.05), k=5 (number of parameter) and n=110 (number of observation).

$$F_{0.05(4,\ 105)}$$

Using the f distribution table the result derived is 2.45.

Thus, since the F-stat > $F_{0.05(4,\ 105)}$ (29.4940 > 2.45) we tend to reject the null hypothesis and conclude the NPM depends on FSZE, FAGE, LEV and AST for the selected manufacturing companies and given sample since the regression explain significant amount of the model.

Using the probability value of F-stat (P-value (F-stat)) to test for the joint hypothesis, which states that reject null hypothesis if the P-value (F-stat) < level of significance. In our regression result P-value is 0.000000 which is less than 5% level of significance (0.000000 < 0.05), we reject the null hypothesis. It indicates that there is joint effect on the dependent variables.

The R-squared gives statistical information about the goodness of fit of information. An R-squared of 1 indicates the regression is perfect in our regression result; R-squared is 0.5291, which indicates that about 52.91% of variation in dependent variable is explained by the explanatory variable. This indicates a good fit since 47.09% (100% - 52.91%) of the variables are attributable to the error term and the closer the R-squared to 1 the better the regression model.

Adjusted R-squared is simply the modification of R-squared and it adjusts the explanatory variable in term of the model, which tends to increase only if variables improve the model more than expected. The adjusted R-squared is 0.5112 (51.12%) as depicted in Table 4.4

The Durbin-Watson test is used to test the autocorrelation. It tests for both the upper and lower of the observation. In the result, the Durbin-Watson is 1.0424, which is lower to the higher and lower DW of 5% level of significance. The values of the lower and upper are 1.571 and 1,780 respectively. This indicates that there is no presence of auto-correlation in the variables used for the study because it does not fall between the upper and lower value of the DW table. The study therefore concludes it's appropriate for decision making.

Table 5: Random Effect Regression Result

Dependent Variable: NPM Method: Panel Least Squared				
Variable	Coefficient	Std. Error	t-Statistic	P-Value
C	-0.0910	0.3747	-0.2430	0.8085
FSZE	0.0569	0.0425	1.3402	0.1831
FAGE	0.1159	0.1052	1.1005	0.2736
LEV	-0.5085	0.0784	-6.4855***	0.0000
AST	-0.1120	0.0258	-4.3345***	0.0000
R-squared	0.5291			
Adjusted R-squared	0.5112			
F-statistic	29.4940***			
Durbin-Watson stat	1.0424			

Source: Author's computation (2021)

Hausman Test

Hausman test is used to test the random effect result against the fixed effect result whether the random effect is being uncorrelated with the explanatory variables. In this study, 5% is used as the level of significance. In table 4.5, the p-value of the hausman test show that the Random Effect specification is appropriate and is preferred in the test result. Hence, null hypothesis that random effect is appropriate is accepted against the alternative hypothesis that fixed effect is appropriate. This is because the Hausman's Chi-Sq P-value is not significant in the test result.

Table 6: Hausman Test Result

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.733847	4	0.6033

Source: Author's computation (2021)

DISCUSSION OF FINDINGS

This study adopted the random effect regression results based on the Hausman test carried out which showed that it is the most appropriate in testing the hypothesis. From the random effect result, it was reviewed that in hypothesis one firm's size has a co-efficient value of 0.0569 with a P-value of 0.1831. This indicates that the variable had a positive and insignificant effect on the net profit margin (NPM) of selected manufacturing companies in Nigeria. Therefore, increase in the firms' total asset will strongly affect the financial performance of manufacturing companies in Nigeria. The result is also in line with the finding of Daniel and Tilahun (2012).

The result also shows that firms' age has a co-efficient value of 0.1159 with an insignificant P-value of 0.2736. This indicates that the variable has a positive and insignificant influence on net profit margin (NPM) of selected manufacturing companies in Nigeria. It means that aged manufacturing companies improves financial performance because younger firms may find it difficult to survive in an existing market. This finding is in harmony with the finding of Yuvaraj & Abate (2013) but contradicts the finding of Mohammed & Usman (2016).

It is reviewed that leverage has a co-efficient value of -0.5085 with a significant value of 0.0000. It indicates that the variable has a negative and significant relationship with net profit margin (NPM) of selected quoted manufacturing companies in Nigeria. This implies that the higher the level of leverage, the lower the financial performance of selected quoted manufacturing companies in Nigeria proxied by NPM. This finding is in harmony with the finding of Yuvaraj & Abate (2013) but contradicts the finding of Mohammed & Usman (2016).

Furthermore, asset turnover has a co-efficient value of -0.1120 with significant P-value of 0.0000. This indicates that the variable has a negative and significant influence with net profit margin (NPM) of selected quoted manufacturing companies in Nigeria.

SUMMARY

This study investigated the effect of firms' specific attributes on financial performance among selected quoted manufacturing companies in Nigeria Panel data technique (fixed effects and random effects models) were used to

investigate the effect of firms' specific attributes on financial performance of selected quoted manufacturing companies in Nigeria. The Hausman specification test showed the random effect model is the more suitable model in this study. However, the analysis revealed that LEV and AST are statistically significant while FSZE and FAGE are not statistically significant with financial performance of selected quoted manufacturing companies in Nigeria.

CONCLUSION

Firms' size had a positive and insignificant effect with financial performance of selected quoted manufacturing companies in Nigeria. It implies that the bigger firms are likely to generate larger returns for firms than smaller firms, so it has a strong influence on financial performance.

Firms' age is positive and had insignificant relationship with financial performance of selected quoted manufacturing companies in Nigeria. This indicates that new firms are perceived unable to achieve economies of scale and they rarely have the sufficient managerial resources and expertise due to the risk rate that the firm may fall with time, therefore, the longer a firm is in operation has influence on financial performance.

Leverage had a negative and significant influence on the financial performance of the selected quoted manufacturing companies in Nigeria based on the findings, companies are likely to focus their financing ability so as to increase the value of the firm and its performance and they realized the use of financing leverage causes the financial structure of a firm being simple and also the impact the owners have on the firm increases by issuing the common stock, whereas the claim creditors have on the firm increases with the use of borrowed funds.

Asset turnover is negative and significantly affect the financial performance of selected quoted manufacturing companies in Nigeria. This indicates that the variable has no strong influence on the financial performance of selected quoted manufacturing companies in Nigeria.

RECOMMENDATIONS

In view of the findings of this, policy implication and conclusion, the following recommendations were made

- The study suggest that manufacturing companies should be more inclined to finding ways to increase and obtain the optimal utilization of their assets, while making the best use of their resources during the process of producing and distributing their products as this may go a long way in improving their financial performance.
- Manufacturing companies needs to be careful in decisions making when it comes to leverage because companies financing need to balance between equity and debt for the purpose of avoiding high leverage and low profitability. Great attention should be paid to leverage since companies that are highly leveraged may be at risk of bankruptcy if they are unable to make payments on their debt; they may also be unable to find new lenders in the future. On the other hand, leverage can increase the shareholders' return on their investment and make good use of the tax advantages associated with borrowing
- This study suggests the need for firms to optimalize size level for the purpose of achieving good financial performance. The investors need to consider this as a firm size in determining whether or not to invest their funds since it is found to moderates other determinants of financial performance.
- There is a significant need to have highly qualified employees in the top managerial staff since the age of the company has influence on its good financial performance.

REFERENCES

Abdullahi, S. K., Martins, I. E., Jude, D., & Ado, A. (2019), Firm Characteristics and Financial Performance of Consumer Goods Firms in Nigeria. *Journal of Economics and Finance*

Adeleye, O. K. (2020), Firm Characteristics and Earning Quality of Quoted Manufacturing Firms in Nigeria. *International Journal of Academic Research in Economics and Management Sciences*, 9(3), 45–51

Asimakopoulos, O., Samitas, A.& Papadogonas, T., (2009) Firm-specific and economy wide determinants of firm profitability: *Journal of Managerial Finance*, 35(11),930-939

Bano, N.E, Scholar, B.W., & Azeem, C.M. (2012). Impact of Liquidity Ratios on Profitability; case of oil and gas companies of Pakistan. *Interdisciplinary journal of Research in Business 1* (7) 95-98.

Bist, J., Mali, R., SabitaPuri, Jha, R.K., SachyamKayastha & Bhattarai, S. (2017), "Impact of firm characteristics on financial performance of insurance companies in Nepal", Osmania Journal of International Business Studies, 12(1), 1-11.

Dioha, C., Mohammed, N.A., & Okpanachi, J. (2018), "Effect of firm characteristics on profitability of listed consumer goods companies in Nigeria", Journal of Accounting, Finance and Auditing Studies, 4(2), 14-31.

Efuntade, A. O.& Akinola, A. O., (2020), Firm characteristics and financial performance in quoted manufacturing companies in Nigeria. *International Journal of Business and Finance Management Research* 7, 25-32

Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. California Management Review, 33, 114-135

Jensen, M.C, & Meckling, W.H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*. 20(2)

Kaguri, W.A. (2013). "Relationship between firm characteristics and financial performance of life insurance companies in Kenya", unpublished master's thesis, University of Nairobi.

Kahihu Peter Karugu, Wachira D. Muturi & Stephen M. A. Muathe (2020). Market Risks, Firms' Size and Financial Performance: Reality or Illusion in Microfinance Institutions in Kenya. *International Journal of Economics and Finance; 12(11)*.

Lang M. & Lundholm R. (2013). Cross sectional determinants of analyst rating of corporate disclosures. J. Account. Res. 31(2):246-271.

Mohammed, A. & Usman, S. (2016), "Corporate attributes and share value of listed pharmaceutical firms in Nigeria", Journal of Arts, Science and Commerce, 7(1), 88-98, doi: 10.18843/ rwjasc/v7i1(1)/10.

Musa Abdel Latif Ibrahim Al Nawaiseh (2020), The Effect of Firm's Age, Size and Growth on Its Profitability: Evidence from Jordan *European Journal of Business and Management* 12(5)

Naz, F., Ijaz, F., & Naqvi, F. (2016). Financial performance of firms: Evidence from Pakistan cements industry. Journal of Teaching and Education, 5(1), 81-94. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2788357

Okwoli, A.A., & Kpelai, S.T. , (2006). Introduction to Managerial Finance, 1st ed., Tomma Press, Jos.

Omondi, M.M. & Muturi, W. (2013), "Factors affecting the financial performance of listed companies at the Nairobi securities exchange in Kenya", Research Journal of Finance and Accounting, 4(15), 99-104.

Pearce, J. A., & Robinson, R. B. (2011). Strategic management: Formulation, implementation and control. (12th ed.). New York: McGraw Hill/ Irwin.

Shehu, U.H. (2011). "Determinants of Financial Reporting Quality: An In-depth Study of Firm Structure." *Journal of Modern Accounting and Auditing* 2(4), 54-76

Wernerfelt, B. A. (1984). A resource based view of the firm. Strategic Management Journal, 5,171-180.

Yazdanfar, D. (2013). Profitability determinants among micro firms: Evidence from Swedish data. International Journal of Managerial Finance, 9(2), 150-160.