FIRM ATTRIBUTES AND FIRM PERFORMANCE OF QUOTED HEALTH COMPANIES IN NIGERIA

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Abstract

The study examined the effect of firm attributes and firm performance of quoted healthcare companies in Nigeria. This study used a sample of 6 healthcare and pharmaceuticals companies in the Nigerian Exchange Group that have consistently published their annual audited financial report for the period of 2012 to 2021. The data collected were analyzed using descriptive statistics, correlation analysis and multiple regression technique. The results shows that firm size had a significant positive effect on firm performance, ownership structure had no significant negative effect on firm performance, firm leverage had no significant negative effect on firm performance and firm age had no significant positive effect on firm performance. The study therefore recommends that management and shareholders should consider the size of the firm as a major firm attributes that strongly brings about improve firm performance.

Keywords: Firm Size, Leverage, Age, Ownership Structure, Firm Performance

Introduction

Firm performance (FP) is the medium of assessing, observing, monitoring, reporting and evaluating growth of the firm as stressed by researchers and scholars (Amadi & Ndu, 2018). FP is the mechanism adopted by corporate organisations to actualize its short, medium and long-term goals through the efficient usage of its assets and capital resources committed by the various stakeholders (Sachs et al, 2019). FP is the potential and ability of a business to efficiently utilize the available resources to achieve targets in line with the set plans of the company, keeping in mind their relevance to the users. Ombaka et al (2015) added that firm resources are vital instrument of strategic management function that enhance production and smooth running of the firm. Most firms are constantly seeking to improve their performance and the leading firms can be

seen as those who constantly seek to innovate, advance through the elements of firm attributes for improve FP.

Firm attributes are mainly corporate governance mechanism use by business organisation to access the success and failure of the organisation. Corporate governance (CG) issues moved from the fundamentals to the limelight with the speed of light due to the emergence of corporate failures and accounting scandals in corporation organisations (Sani, 2009). CG emerged as a result of the desires of business regulators to enforce firm performance in relation to good compensation packages offer to the employees. However, firm attributes have been explored by different researchers and scholars like (Mohammed, 2017; Abdullahi, 2016; and Akenroye et al, 2022), who argued that "firm attributes are the internal element of the organisations that is resource-based which might influence the smooth functioning, operations, performances and growth sustainability from one industries to another industries".

To this end, firm attributes are otherwise referred to as corporate governance characteristics which majorly influence compensation structure of corporate organisation. These corporate firm characteristics are firm size, firm growth, liquidity and interest coverage ratio, investment opportunity, profitability, risk and tangibility (Suhaila et al, 2008). While Abdullahi (2016) posited that firm attributes include firm age, firm size, cash flow, dividend, firm leverage, operating expenses etc. Dean et al (2000) stated that firm attributes are the fundamental drivers of firm's compensation scheme that bring about improved performance and success of the business organisations.

From the foregoing it is crystal clear that, numerous studies have been conducted in Nigeria on firm attributes and firm performance like the works of (Akenroye et al, 2022; Uzoka et al, 2020; Olaniyi & Obembe, 2015; Adegoroye et al, 2017; Oliver & Chukwuani, 2014), and to the best of our knowledge non have looked into the health sector. This form one of the identified gap in literature which this study seeks to address. Also, the study helps to bridge the knowledge gap of timing by extending the period to 2021, as previous studies end in 2020. The study therefore intends to reduce the identified gaps in knowledge by looking at how firm attributes parameters (firm size, ownership structure, firm leverage and firm age) drive firm performance of quoted health and pharmaceuticals companies in Nigeria. Based on the above, the following objectives will direct the study:

The main objective of the study is to examine the effect of firm attributes on firm performance of quoted health companies in Nigeria. Therefore, the precise objectives are to:

(i)   Examine the effect of firm size on firm performance of quoted health companies in Nigeria.
(ii)   Ascertain the effect of ownership structure on firm performance of quoted health companies in Nigeria.

(iii)   Assess the effect of firm leverage on firm performance of quoted health companies in Nigeria.

(iv)   Investigate the effect of firm age on firm performance of quoted health companies in Nigeria.

1.1   Research Hypotheses

The following hypotheses stated in null form were tested:

H_{O1}:   Firm size has no significant effect on firm performance of quoted health companies in Nigeria.

H_{O2}:   Ownership structure has no significant effect on firm performance of quoted health companies in Nigeria.

H_{O3}:   Firm leverage has no significant effect on firm performance of quoted health companies in Nigeria.

H_{O4}:   Firm age has no significant effect on firm performance of quoted health companies in Nigeria.

LITERATURE REVIEW

2.1   Firm Performance

Firm performance (FP) is a confusing concept used interchangeably in relation to productivity, profitability, competitiveness and efficiency (Elena-Iuliana & Maria, 2016). Oyedokun, et al (2020) stated that firm's ability to survive in the future as the world's economies are becoming more and more globally integrated depends on the acceptable returns in the competitive global market. Al-Juboori, et al (2021) defined FP as the extent to which revenue, profit, cost reduction, return on sales, and return on assets as an indicator of financial performance.

Sonnentag (2012) argued that there are two aspects to consider when defining corporate performance. He stated that there is a need to differentiate between the two elements. The first aspect is an action (that is behavioural) aspect and the second is an outcome aspect of production. Iliemena, et al (2019) stated that the behavioural part refers to the upshot or effect of individual behavior. The outcome aspect depicts behaviours that are likely to result in outcomes such as the number of engines assembled, sales figures, etc. Odusanya, et al (2018) defined FP as the maximisation of the optimum goal for a company to remain in business and to withstand competition from firms operating in similar industry. SP is the efficient and effective utilization of the human assets, material resources and capital resources in the attainment of the goals and objectives of the organization.

Consequently, performance' is a general measure in determining a firm's overall financial health over a given period. It can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. It can also be referred to as the independent business criterium to assess its overall outcomes concerning its own

goals (Vladimir et al, 2016). Zeitun and Tian (2017) opined that due to the complexity and ambiguity in the definition of the term 'performance,' it is an unclear subject in the financial strategy of most corporate organizations.

2.2 Firm Attributes

Firm attributes are corporate governance mechanism that is adopted by quoted health companies for the smooth running of the business for improve FP. Firm attributes are the basic feature that distinguishes health and pharmaceutical companies from other quoted companies in the floor of the Nigeria Exchange Group (Ali & Isa, 2018). According to Farouk, et al (2019), firm attributes are controllable or uncontrollable factors that influence internal or external mechanism of firm which might strategically affects the decision processes. In the opinion of Siyanbola, et al (2020), profitability, firm size and firm age are the main firm attributes that are internal to a firm. Firm attributes are enormous in empirical research, the study would make use of the following firm characteristics (firm size ownership structure, and firm leverage).

2.2.1 Firm Size

Firm size (FS) is usually considered to be of importance in the context of capital structure of business organization. The size of a firm has become an academic debate by scholars and researcher as an instrument of growth (Abiodun, 2013). FS pinpoints the benefits the firm gains within and outside its operating environment. Bigger organizations (i.e. with greater assets) has the advantages of been given loan compare to organizations with lesser capital because of the risk of default. Equally, smaller corporations usually have lower leverage ratio, which is as a result of higher agency costs.

According to Uzoka, et al (2020: 74), "the size of the firm is a basic feature that determines the operation and cost control structure of the business organization". They maintained that firms that expand its business operations command greater market power, and enjoy economies of scale with access to resources to compete favourably than smaller firms. Manoel, et al (2018) argued that the smaller the company size, the need to hold more cash for safety liquidity and illiquidity problems that may arise in the future. More likely, large firms are more likely engage in earnings management to minimize current cash balances for the purpose of lowering their public visibility. The costs borne by the firm is depending on its size. Smaller firms are less important and hence are less subject to political wealth distribution.

2.2.2 Ownership Structure

Ownership structure (OS) is seen as one of corporate governance mechanism that influences firm performance through its influence on the principal-agent relationships, Renata and Daniela, 2015). Long, et al (2013) argued that the ownership of a firm is a

main firm characteristics and governance structure that influence performance of the organisation. Meanwhile, shareholders are always regarded as the corporate owners, while directors are agents or representatives of shareholders who are supposed to allocate business resources in a way to increase their wealth. Nnabuife, et al (2017) added that OS is a sound corporate governance attributes that may affect the scope of a firms' agency cost and FP.

2.2.3 Firm Leverage

Firm leverage is considered as a significant factor of firm characteristics. The trade-off theory suggests that highly leveraged companies witness the tendency of bankruptcy and risks of financial distress while highly levered companies are expected to maintain a higher level of earnings to meet employee's compensation policy (D'Mello et al, 2008).

Senan, et al (2021: 322) stressed that management of business organization take strategic decision concerning optimum capital structure. In the trade-off theory, the optimal CS policy which is consequence of trade-off of the marginal benefits of increasing leverage and impacts on interest tax shield and the disciplinary role that debt carries on managerial control over free cash flows and against the marginal costs of additional leverage (Jensen, 1986). The target capital structure of business organization is the art of maintaining the level of debt-to-equity in its financing decision. Therefore, increased in leverage will increase the value of companies until a certain level. Increased levels of leverage after the rule will reduce the value of the company as a result of the increased risk of corporate debt.

2.2.4 Firm Age

Firm age (FA) is one of the most important components of firm characteristics. The age of companies has been measured in so many ways depending on the focus of the study. Some researchers in previous studies stated that number of years of incorporation of a firm is its age while some other researchers stated that the year a business institution was listed rather than when it was established accurately defines the age of the firm. Al Qaisi, et al (2016: 83), defined FA "as the length of time that the company has been in existence".

Ashharia and Faizala (2018), older firms have the tendency of witnessing more stable cash flows and lower growth opportunities than younger firms to achieve the compensation strategy of the organisation. Therefore, matured firm with better reputations and goodwill has access to fund because of the long relationship with money deposit banks while smaller and younger firms are more likely to be financially constrained. Moreover, older firms can easily achieve the optimal level of cash flows to meet unforeseen expenses as well a compensation benefit of staff. Therefore, inefficiency of cash holding is usually associated with younger firms and thereby affects the firm liquidity level and impact on FP (Priya & Nimalathasan, 2013).

2.3   Empirical Review

Akenroye, et al (2022) used the ex-post facto research design to examine the effect of firms' attributes on FP of quoted companies in Nigeria. The aim of the study is to examine the effect of company size, asset tangibility investment and firm age on FP proxied by Net Profit Margin and return on capital employed. A purposive sampling technique is adopted to sample 111 out of the population of 161 quoted companies in Nigeria for the period of 2011 to 2020 while descriptive, correlation matrix and multiple regressions technique used in the analysis of data. The results showed that company size had a significant positive effect on FP proxies while asset tangibility investment and firm age had no significant effect on FP proxies.

Temuhale and Ighoroje (2021) employed ex-post facto research design to sample 7 industrial goods firm to inspect the influence of asset structure and CS performance of quoted industrial goods firms in Nigeria from 2011 to 2019. The study used descriptive statistics, correlation and panel regression technique for analyzing the data. The results reveal that asset structure exert no significant effect on capital structure measured by ratio of long term debt to total equity, ratio of long term debt to total asset exert a significant positive effect while ratio of long term debt to total long term capital exert a significant negative effect on performance measured by return on assets.

Azizi, et al (2021) conducted a study on the effect of ownership and management structure on family businesses performance. The study was carried out in Iran. They employ primary data by administering questionnaire to 163 CEOs of family businesses of the food industry in Tehran Province of Iran in the analysis of data. The results showed that family stakeholder exerts a positive influence on the performance of family businesses.

Mustapha, et al (2020: 5), used a "sample of fifteen (15) banks listed in the Nigeria Stock Exchange for the period of 2013 to 2015 to examine the relationship between corporate governance and performance measured by ROA". The results of random effect regression revealed firm size had a significant positive relationship with performance. Okoye, et al (2020: 55), studied the "effect of corporate governance on the financial performance of commercial banks in Nigeria". The results revealed that firm size impact positively on financial performance measured by Return on Assets".

Uzoka, et al (2020) studied the effect of firm attributes on FP through an interaction approach by applying ex-post facto and panel research design. The aim of the study is to examine the effect of operating efficiency, assets tangibility, firm size, firm age, corporate stability and leverage policy on FP. They sample some selected industrial goods firms in Nigeria for the period of 2009 to 2018 for the gathering of data while descriptive statistics, correlation analysis and ordinary least square regression to analysed the data. The findings revealed that operating efficiency, assets tangibility and leverage policy exert a significant negative effect on FP while firm age and corporate stability exert negative no significant effect on FP and firm growth and firm size were positively not significantly related with FP.

Olayemi, et al (2020) used a survey research design to evaluate the relationship between level of innovativeness and FP in a selected organization. The aim of the study is to evaluate the relationship between level of innovativeness (management attitude, firm size, research and development, organisational resources and workers autonomy). The study is carried out in Nigeria operating environment where questionnaire constructed on 5-point Likert scale was distributed to 150 respondents for the analysis of data. The univariate analysis of variance (ANOVA) and Cronbach Alpha used to test the reliability of the research instrument. The results showed that all the instrument of innovativeness exert a significant positive relationship with firm performance at p-value < 0.05 except firm size that exhibit insignificant relationship. This indicates that level of innovativeness is a strong mechanism of internationalization that drives the performance of the organisation. The study contributed to knowledge that management and business practitioners embracing innovativeness immensely expand the firm and development of the economy generally.

Esan, et al (2020:44), "used panel data from period of 2005 to 2017 to empirically examine the effect of corporate governance on financial performance of selected deposit money banks and found out that bank age has significant effect on performance measured by on return on assets, return on equity and earnings per share of selected deposit money banks".

2.4   Theoretical Review

This study is anchored on stakeholder theory. The theory as developed by Freeman (1984), categorized the stakeholder into customers, employees, suppliers, political action groups, environmental groups, local communities, the media, financial institutions, governmental groups, and more. Freeman, et al (2004:368) "posit that corporate environment as an ecosystem of related groups, all of whom need to be considered and satisfied to keep the company healthy and successful in the long-term". Stakeholders' theory states that firms have responsibility to large array of the society, which includes customers, employees, suppliers, community, public, interest groups, government etc apart from the shareholders.

According to the theory, the success of any firm is resting on its capacity to balance the conflicting demands of its various stakeholders (Tandanu & Wibowo, 2008). All the stakeholders have the inherent rights to be treated fairly and therefore the managers of the firms must manage it to benefit all stakeholders (Hamid & Atan, 2011). This stakeholder's theory is most relevant for this study since the theory emphasis on the need for collective commitment by the government, individuals' society and the general public to invest on infrastructures that will improve on FP of the health sector in Nigeria.

METHODOLOGY
3.1   Research Design

The study adopted the ex-post facto research design. The justification for using ex-post facto research design is that it permits observing of one or more variables over a given period of time, as well as does not allow the researcher to manipulate the variables subject to investigation.

3.2   Population and Sampling

The population of the study consists of ten (10) quoted health and pharmaceutical companies in the Nigeria Exchange Group (NGX). Besides, each firm in the population must have finished its obligation in delivering annual reports for ten consecutive years for the period of 2012 - 2021. The population comprised of Ekocorp Plc; Union Diagnostic and Clinical Services Plc; Morison Industries Plc; Evans Medical Plc; Fidson Healthcare Plc; GlaxoSmithKline Consumer Nigeria Plc; May and Baker Nigeria Plc; Neimeth International Pharmaceuticals Plc; Nigeria German Chemicals Plc, and Pharma-Deko Plc.

The study employed simple random and systematic sampling techniques in selecting a sample of 6 quoted health and pharmaceutical companies in Nigeria. The choice of this sample size was based on the availability of annual reports for the period under review, as at 31st December, 2021 in the Nigeria Exchange Group (NGX, 2021 Fact Sheet). The sampled companies are; Morison Industries Plc, Fidson Healthcare Plc, Glaxo-SmithKline Consumer Nigeria Plc, May and Baker Nigeria Plc. Neimeth International Pharmaceuticals Plc, and Pharma-Deko Plc.

3.3   Model Specification

In the light of the methodological knowledge gathered and empirical literature reviewed, a multiple regression model would be specified. A multiple regression model is one that seeks to explain change or variation in the value of one variable called the dependent variable (firm performance) on the basis of changes in other variables known as the independent or explanatory variables using pooled data. The model assumes that the dependent variable is a linear function of the independent variables.

$$FP_t = \beta_0 + \beta_1 FS_t + \beta_2 OWS_t + \beta_3 FLEV_t + \beta_4 FA_t + + \varepsilon_{it} \dots\dots\dots\dots\dots\dots\dots\dots\dots (1)$$

Where

FP	=	Firm performance
FS	=	Firm size
OWS	=	Ownership structure
FLEV	=	Firm leverage
FA	=	Firm age
β_0	=	Constant
β	=	Variables that vary across companies but do not vary over time
ε_{it}	=	error terms over the cross section and time.

3.4   Measurement of Variables

The measurement of the dependent and independent variables is presented in Table 1 below:

Table 1: Measurement of Variables

Variable	Measurement	Sources	Apriori sign
Firm performance (Dependent variable)	Firm performance was measured by returns on assets (ROA) × 100	Omotola & Akrawah (2019)	
FS = Firm size (Independent variable)	Firm size was measured by the logarithms of total assets	Okoye et al., (2020)	+
Ownership structure (Independent variable).	Ownership structure was proxied by the number of shares held by institutional investors	Tulepova (2017)	+
Firm leverage (Independent variable)	Firm leverage will be measured by the ratio of debt to total assets.	Umry & Diantimala (2018).	+
Firm age (Independent variable)	Firm age was measured by the number of years that separate the present date and the incorporation date.	Umar & Sylvanus (2015)	+

Source: Researcher's Compilation (2023).

3.5   Method of Data Analysis

This study employed multiple regressions technique to examine the relationship between the dependent and independent variables. The study also conducted other preliminary test such as descriptive statistics and Pearson correlation matrix. The analysis in this study was carried with the help of E-Views 9.0 econometric software.

DATA PRESENTATION AND ANALYSIS
4.1   Descriptive Statistics

The table below showed the descriptive statistics of the sampled firms over a period of 2012 to 2021.

Table 2: Descriptive Statistics

	FP	FS	OWS	FLEV	FA
Mean	-0.636610	6.713051	41.18644	53.90847	31.11864
Median	2.000000	6.880000	43.00000	56.31000	36.00000
Maximum	26.63000	7.520000	63.00000	106.9400	43.00000
Minimum	-35.21000	5.620000	18.00000	21.54000	5.000000
Std. Dev.	11.81742	0.587526	10.71170	15.45411	11.68566
Skewness	-0.859561	-0.432800	-0.457358	0.177411	-0.973426
Kurtosis	4.348443	2.069326	3.080419	4.330558	2.550666
Jarque-Bera	11.73530	3.971231	2.072797	4.661692	9.813993

Probability	0.002830	0.137296	0.354730	0.097213	0.007395
Sum	-37.56000	396.0700	2430.000	3180.600	1836.000
Sum Sq. Dev.	8099.780	20.02085	6654.949	13852.11	7920.169
Observations	59	59	59	59	59

Source: E-views 9 Output (2023)

The table 2 above indicated the mean which is the (average) for each of the variable alongside their standard deviation and normality test using Jarque-Bera (JB) statistics. Table 2 provided a detailed explanation of the history of the selected quoted Healthcare and Pharmaceuticals companies used for the study. Return on asset (ROA) was used as a measure of FP. Based on the finding, returns on asset (ROA) was -0.63. The low ROA indicates that most of the sampled companies in Nigeria were not efficient in the use of their total assets in generating profit.

Based on the firm attributes, it was observed that on the average that firm size (FS) was 6.71 with a corresponding standard deviation value of 0.58. This implies that the size of the sampled companies was small compare to the media value of 6.88. Ownership structure (OWS) has an average value of 41.18 and a standard deviation value of 10.71. This means that OWS was mainly dominated by institutional owners. Firm leverage (FLEV) on the average was 53.90 with a corresponding standard deviation value of 15.45. This implies that majority of the sampled companies were highly leveraged. Firm age (FA) had an average value of 31.11 and a standard deviation value of 11.68. This indicates that the sampled companies on the average were about 31years and 11 months old. On the Jarque–Bera test of goodness-of-fit, the outcome suggests that data FP, FLEV and FA were normally distributed except FS and OWS.

4.2 Correlation Analysis

The correlation analysis is used to measures the degree of association between the dependent variable and explanatory variables. The correlation result of was presented in table 3 below:

Table 3: Correlation Analysis

	FP	FS	OWS	FLEV	FA
FP	1.000000	0.635180	-0.098259	-0.108978	-0.269745
FS	0.635180	1.000000	-0.179015	0.104466	-0.490302
OWS	-0.098259	-0.179015	1.000000	-0.166407	0.861522
FLEV	-0.108978	0.104466	-0.166407	1.000000	-0.134469
FA	-0.269745	-0.490302	0.861522	-0.134469	1.000000

Source: E-views 9 Output (2023)

The Pearson correlation coefficient result in Table 3 above showed that firm size (FS) was positively and moderately correlated with firm performance (FP =0.6351) and firm leverage (FLEV=0.1044) while negatively and moderately correlated with

ownership structure (OWS=-0.1790) and firm age (FA=-0.4903). This indicates that the larger the size of the firm, the better the performance. Ownership structure (OWS) was negatively and weakly correlated with firm performance (FP =-0.0982), negatively correlated with firm size (FS=-0.1790) and firm leverage (FLEV=-0.1664). This implies that the presence of institutional ownership would lead to low of level of FP. Firm leverage (FLEV) was negatively and moderately correlated with firm performance (FP =-0.1089), ownership structure (OWS=-0.1664) and firm age (FA=-0.1344). This implies that increase in FLEV might lead to a decrease in FP. Firm age (FA) negatively and moderately correlated with firm performance (FP =-0.2697), firm size (FS=-0.4903) and firm age (FA=-0.1344) while positively and highly correlated with ownership structure (OWS=0.8615). A vivid look at the correlation coefficients of the independent variables, FA and OWS was perfectly correlated and this indicates that the problem of multicollinearity is likely to be present among the distribution. Therefore, variance inflation factor test was conducted to check whether the problem of multicollinearity exist or otherwise. The result is presented in Figure 1 below:

Figure 1: Variance Inflation Factor

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	377.8344	267.1575	NA
FS	7.982065	256.2589	1.915189
OWS	0.071340	91.25739	5.689757
FLEV	0.006288	13.96518	1.043892
FA	0.075340	58.73729	7.151125

Aggregate value Centered VIF = 3.95
Source: E-views 9 Output (2023):

From Figure 1 above, the variance inflation factor results revealed that the aggregated mean centered VIF value of 3.95 which did not exceed 10 reveals the absence of multicolinearity problem in our model. This, therefore, reveals the absence of multicolinearity among the explanatory variables.

4.3   Regression Results
The multiple regression technique was applied to test our formulated hypotheses. The results were presented in Table 4 below:
Table 4: Multiple Regressions

Variable	Coefficient	Std. Error	t-Statistic	Prob.

C	-91.10341	19.43796	-4.686881	0.0000
FS	14.90160	2.825255	5.274428	0.0000
OWS	-0.238373	0.267096	-0.892463	0.3761
FLEV	-0.143856	0.079298	-1.814112	0.0752
FA	0.257221	0.274481	0.937115	0.3529

R-squared	0.443703	Mean dependent var	-0.636610
Adjusted R-squared	0.402496	S.D. dependent var	11.81742
S.E. of regression	9.134674	Akaike info criterion	7.342970
Sum squared resid	4505.882	Schwarz criterion	7.519033
Log likelihood	-211.6176	Hannan-Quinn criter.	7.411698
F-statistic	10.76762	Durbin-Watson stat	1.593350
Prob(F-statistic)	0.000002		

Source: E-views 9 Output (2023)

Decision Rule: Hypotheses is tested at 5% (0.05) at level of significance. The null hypothesis (H_O) is accepted, if the probability value (P-value) is greater than 5% (0.05) otherwise rejected.

Table 4 above showed that the coefficient of determination (R^2) value of 0.443703 which revealed that about 44% of the systematic changes in the dependent variable were jointly explained by the independent variables and leaving about 56% unexplained by factors not captured in the model. On account of the overall significance of the model, the F-statistic of 10.76 and its associated probability of 0.00 indicate that all the independent variables taken holistically significantly explain the dependent variable. Hence, the explanatory power of the model is strong.

Based on the individual relationship of the independent variables, firm size (FS) had a significant positive effect on firm performance (FP) at 1% level of significance. The positive effect implies a change in FS would significantly bring about an increase in FP but it was statistically significant at 1% level of confidence. The significant relationship is because the variable passed the t-test at < 0.05 level of significance.

Ownership structure (OWS) had no significant negative effect on firm performance (FP) at $p > 0.05$. The negative effect implies a change in OWS would to a decrease in FP but it was statistically not significant. The significant relationship is because the variable failed the t-test at $p > 0.05$ level of significance.

Firm leverage (FLEV) had no significant negative effect on firm performance (FP) at $p > 0.05$. The negative effect implies a change in FLEV would to a decrease in FP but it was statistically not significant. The significant relationship is because the variable failed the t-test at $p > 0.05$ level of significance.

In the case of firm age (FA), the variable had no significant positive effect on firm performance (FP) at $p > 0.05$. The positive effect implies the older the firm the better the performance but it was statistically not significant. The significant relationship is because the variable failed the t-test at $p > 0.05$ level of significance.

4.4   Test of Hypotheses
The probability values of each of the variables were used in testing the formulated hypotheses.

Test of Hypothesis One: Firm size has no significant effect on firm performance of quoted health companies in Nigeria.

The regression results showed that firm size had a significant positive effect on firm performance at 1% level of significance. Therefore, the hypothesis should be rejected that firm size had a significant effect on firm performance.

Test of Hypothesis Two: Ownership structure has no significant effect on firm performance of quoted health companies in Nigeria.

The regression results showed that ownership structure had no significant negative effect on firm performance at $p > 0.05$. Therefore, the hypothesis should be accepted that ownership structure has no significant effect on firm performance.

Test of Hypothesis Three: Firm leverage has no significant effect on firm performance of quoted health companies in Nigeria.

The regression results showed that firm leverage had no significant negative effect on firm performance at $p > 0.05$. Therefore, the hypothesis should be accepted that firm leverage has no significant effect on firm performance.

Test of Hypothesis Four: Firm age has no significant effect on firm performance of quoted health companies in Nigeria.

The regression results showed that firm age had no significant positive effect on firm performance at $p > 0.05$. Therefore, the hypothesis should be accepted that firm age has no significant effect on firm performance.

4.5   Discussion of Findings
The regression results showed that firm size had a significant positive effect on firm performance at 1% level of significance. The result was consistent with the findings of Akenroye, et al., (2022), Okoye, et al., (2020), Olayemi, et, al., (2020) and Mustapha,

et al., (2020) in Nigeria that company size had a significant positive effect on FP. Ownership structure had no significant negative effect on firm performance at $p > 0.05$. The result was consistent with the findings of Azizi, et al., (2021) in Iran that family ownership exerts a positive influence on the performance. Firm leverage had no significant negative effect on firm performance at $p > 0.05$. The result was contrary to the findings of Temuhale and Ighoroje (2021) in that ratio of long term debt to total asset exert a significant positive effect on FP. The findings of Uzoka, et al., (2020) were also contrary to the results that firm leverage had a significant negative effect on FP. Firm age had no significant positive effect on firm performance at $p > 0.05$. The result was consistent with the findings of Akenroye, et al., (2022) in Nigeria firm age had no significant effect on FP. The findings of Uzoka, et al., (2020) and Esan, et al., (2020) were also contrary to the results that firm age exerts negative no significant effect on FP.

CONCLUSION AND RECOMMENDATIONS

The study examined the effect of firm attributes and firm performance of quoted healthcare companies in Nigeria. From the results of the study, it was observed that firm attributes are the fundamental drivers of firm's compensation scheme that bring about improved performance and success of a business organisation. The study therefore, recommends that management and shareholders should consider the size of the firm as a major firm attributes that strongly brings about improve firm performance. Also, Management should ensure the ownership structure and firm age of health and pharmaceuticals companies are given consideration as such firm attributes that might enhance firm performance over time.

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