



FIRM CHARACTERISTICS AND FINANCIAL PERFORMANCE OF PENSION FUND ADMINISTRATORS IN NIGERIA

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Abstract

The study examined the firm characteristics and financial performance of selected Pension Fund Administrators in Nigeria. The population of the study consist of all the Pension Fund Administrators (PFAs) for the period of five years 2018 to 2022. The sample consisted of 10 selected post recapitalisations of the PenCom. A purposive sampling was used in selecting the sample size of the study. The study used secondary data extracted from the published annual reports and accounts of sampled PFAs. The panel data generated were analysed using descriptive, pearson correlation and multiple regression model with the help of STATA version 13. The model proved to be statistically significant with a combined probability of F-statistics of 0.0001 which is below the adopted level of significance of 5%. The result shows that the firm age with a p-value of 0.000 has a significant positive effect on financial performance which is measured by Unit Price. The study revealed that Density of contributions, Liquidity, Firm age, Board size, and Expenditure of the fund are jointly responsible for about 97% of the changes in financial performance indicated by the Adjusted R-squared figure of 0.970853. Thus, the study concluded that firm characteristics has a significant effect on financial performance of PFAs. Based on these findings the study recommended that the PFAs should manage the density of contributions, firm age, board size, liquidity, and expenditure of the fund for better financial performance in the pension industry.

Keywords:

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1. Introduction

The financial performance of a firm plays a major role for increasing the market value of the firm and the growth of the industry which ultimately leads towards the overall prosperity of the economy. There are several underlying firm characteristics that differ systematically across firms and financial performance of a firm in the industry which can be influenced by a variety of factors both within and outside its operating environment. Pension Fund Administrators (PFAs) are also known as

pension companies are allowed to handle pension money and assets for individuals and organizations within the terms of the pension law. In Nigeria, pension funds are privately managed by PFAs whose activities are monitored by the National Pension Commission (PenCom). The pension fund custodians are licensed financial institutions that are allowed by the Act to keep pension savings. The PFC should notify the Pension Fund Administrator (PFA) within 24 hours of any receipt of contributions. In the past,

Pension schemes have always been non-contributory and came from budgetary allocations. (Fapohunda, 2013). Due to the complete reliance on administration, regulation, and funding by the government, a lot of issues arose such as diversion of remittance or allocated fund, existence of ghost pensioners on the pension's payroll, non-availability of records, unskilled administration, inadequate funding and delay or lack of payment after retirement (Sule & Ezugwu, 2009).

The Pension Reform Act 2004 was created to address these issues by introducing the Contributory Pension Scheme which is funded through monthly deductions from the employees' salaries and the contributions by the employer. The new Contributory Pension Scheme introduced individual accounts called Retirement Savings Accounts (RSA) for employees and each employee is required by law to open RSA in his/her name with a PFA of his/her choice. They are an important stimulus to capital markets as they are reinvested in the different sectors of the economy such as Domestic shares, Federal Government of Nigeria Securities, Treasury bills, Agency Bonds. The funds are also invested in foreign shares. Pension funds have stimulated the development of capital markets in a way like banks (Oluoch, 2013). Pension funds are vital for advancing the economy through the investment of current retirement savings (Biobele, 2015).

National Pension Commission announced in April 2022 that all PFAs had complied with the Commission's directive for the increase of the Minimum Regulatory Capital from ₦1 billion to ₦5 billion. The exercise, however, resulted in the merger of some of the administrators, reducing their number from 22 to 19. The inability of PFAs to meet up with its basic obligations is the uncertainty attached to the possibility of realizing gains in competitive markets heightens the need for the knowledge of firm characteristics that may give rise to financial performance. There are certain pension fund characteristics namely, firm size, firm age, contribution density, idle

contributions, accumulated fund assets, number of members, administration costs and investment costs which indicate good financial performance of pension funds (Kigen 2016). Theoretical basis for arguing that firm characteristics are related to financial performance can be found in the traditional neoclassical view of the firm and the concept of economies of scale. The problem now is whether the firm characteristics influence financial performance of the PFAs in Nigeria. Studies on the effect of firm characteristics on financial performance have generated mixed results ranging from those supporting a positive relationship to those opposing it. Rodah and Joshua (2020) Conducted a study on the direct effect of firm characteristics on firm financial performance, it found mixed and inconsistent results. Vijayakumar and Tamizhselvan (2010) study revealed a positive relationship between firm size and performance. Many studies were conducted on firm's characteristics and financial performance but did not consider the elements of density of contribution, expenditures of the fund, liquidity, firm age, and board size as proxies of firm characteristics and unity price for financial performance. Therefore, this study aims to examine the relationship between firm characteristics and financial performance of pension funds administrators in Nigeria.

2. Literature review

Firm characteristics refer to the attributes which a particular firm possesses that defines its activities. Firm characteristics are those variables that relatively affect the firm's decision both internally and externally (Shehu, 2012). The internal characteristics such as managerial efficiency, dividend policy, capital structure, firm age, and firm size of PFAs firms predict their position in the competitive environment and enable them to perceive and implement strategies that are geared towards improving their efficiency and effectiveness. The external characteristics such as inflation, money supply, lending rate and exchange rate. The firm characteristics adopted in this study

are Density of contributions, Liquidity, Firm age, Board size, and Expenditure of the fund as suggested by Opeyemi (2019). Firm size has always been an important factor to determine a firm's profitability, to improve performance and be competitive in the market, a company would always try to increase its size.

Density of Contribution (DCON) is defined as the share of the present value of earnings in the active phase of life on which the individual contributes to some contributory pension system for old age. For any given rate of turnover between covered jobs and other uses of time, average density falls when self-employment and informal employment expands and when activity outside the labour force mainly home production rises. Kigen, (2016) stated that the density of contributions received by the pension funds from its contributors is a particularly important determinant of its financial performance. Olouch (2013) also observed that density of contributions is an essential factor that affects pension benefits. The new contributions for the employee and employers according to the Pension Reform Act of 2014 are 8% and 10% respectively. Large contributions provide the PFA with Economies of scale.

Liquidity (LQDY) means the ability of an organization to realize value in money the post liquid among all assets. It implies conversion of assets into cash during the normal course of business and to have regular uninterrupted flow of cash to meet outside current liabilities as and when due and to ensure availability of money for day-to-day business operations. The concept of liquidity in case of companies has two dimensions; the quantitative and qualitative. The quantitative aspect includes the quantum, structure, and utilization of liquid assets. The qualitative aspect emphasizes upon the ability of a firm to meet all present and potential demand on cash in a manner that minimize cost and maximize the value of the business. The International Financial Reporting Standards (2016) defines liquidity as the available cash for the near future, after

considering the financial obligations corresponding to that period. Firm can use liquid assets to finance its activities and investments when external finances are not available. However, higher liquidity can allow a firm to deal with unexpected contingencies and to cope with its obligations during periods of low earnings.

Firm Age (FAGE) can be defined as the number of years of incorporation of the company. Shumway (2001) demanded that listing should be used to define firm age because listing is more economical, and because a company's life starts from the moment of listing. Wang (2011) defined firm age as the number of years that the enterprise has experienced from its establishment to the point of investigation, while if the enterprise dies at the point of investigation, it is also called the life of the enterprise. Examining the relation between firm age and financial performance would seem to be relevant for both theory and practice. If performance declines as firms grow older, it could explain why most of them are eventually taken over. Age could help firms become more efficient. However, old age may also make knowledge, abilities, and skills obsolete and induce organizational decay.

Board Size (BOZE) is the combination of executives and non-executives' directors as members of the board. The code of corporate governance for Nigerian firms provided that at least two (2) non-executive board members should be independent directors, who do not represent any shareholder's interest and hold no special business interest with the firm. They must also be appointed by the firm on merit. In addition, the number of non-executive directors should not be more than that of executive directors, subject to a maximum board size of twenty (20) directors. The independent directors must be solely outside directors who have no other relationship with the companies except being members of the board of directors (SEC, 2003). Boards mostly compose of executive and non-executive

directors. Executive directors refer to dependent directors and non-executive directors refer to independent directors (Shah, Butt & Seed, 2011). At least one third of independent directors are preferred in board for effective functions of the board and unbiased monitoring. Dependent directors are also important because they have insider knowledge of the organization, which is not available to outside directors, but they can misuse this knowledge by transferring wealth of other stockholders to themselves.

Expenditure of the Fund (EXFD) refers to expenses incurred for the administration and management of the fund. Expenses that may accrue specifically to the fund; professional valuation fees, trustee fees and custodial fees, fees for investment management, costs of records retention, benefit calculation, member communications, legal or consulting fees, costs to carry out governance regulations, Audit fees, bank charges and other professional costs approved by the PenCom, 2018. Tijjani, (2012) stated that for Pension Fund Administrators to maintain good finances over a long period of time, they must ensure that their income always outweighs the expenses.

Financial Performance refers to the degree to which financial objectives has been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure firm's overall financial health over a given period and can also be used, to compare similar firms across the same industry or to compare industries or sectors in aggregation. The financial performance analysis identifies the financial strength and weakness of the firm by establishing relationship between the items of the balance sheet and profit and loss account. However, the financial performance of a firm reflects how effectively the firm has been managed and resources utilized. It can be measured in terms of profitability.

There are various measures of financial performance. For instance, return on sales

reveals how much a company earns in relation to its sales, return on assets explain a firm's ability to make use of its assets and return on equity reveals what return investors take for their investments. (Almajali, Y. A., Alamro, S. H., & Al-Soub, Y. Z., 2012). Company's performance can be evaluated in three dimensions. The first dimension is company's productivity, or processing inputs into outputs efficiently. The second is profitability dimension, or the levels at which company's earnings are bigger than its costs. The third dimension is market premium, or the level at which company's market value exceeds its book value.

Unit Price is used in this study as the measure of financial performance. Unit price a standard measure of financial performance of funds in the pension industry and a common concept in fund accounting. It is calculated as the net assets value of the pension funds divided by the number of units held in the pension fund. It is calculated daily to account for changes in net asset value caused by withdrawals from the fund and changes in market values of the underlying assets. Unit price can essentially be defined as an index reflecting the return on the fund assets (Demody & Paino, 2005).

2.1 Empirical Review

James Nwabianke Onukwu, (2022). The study investigated lecturers' perception of contributory pension scheme implementation and job commitment in South-South Nigerian universities. A descriptive survey research that adopted correlational design. Two research questionnaires were used for data collection, "Contributory pension scheme implementation Questionnaire (CPSIQ)" and "University Lecturers' Job Commitment Questionnaire (ULCQ)". The data collected were collated and analysed with mean (\bar{x}) and standard deviation to answer the research questions while the Pearson Product Moment Correlation Statistic was used to test the hypothesis at 0.05 level of significance. The study revealed that the level of contributory pension scheme implementation as perceived

by lecturers in South-South Nigerian Universities was low. It also revealed that the level of Job Commitment of University Lecturers in South-South Nigerian Universities was low; and that there was a significant relationship between Contributory Pension Implementation and Lecturers' Job Commitment in South-South Nigerian Universities. The study, therefore, recommended among others that government and university management should address the concerns of lecturers about the implementation of Contributory Pension Scheme in Nigerian Universities by ensuring prompt and regular remittance of deductions to lecturers' Retirement Savings Accounts (RSA) to create confidence.

Aribaba, Ahmodu, Afolabi, Egbewole, Salaam and Adesunloro's (2022) study examined the effect of firm characteristics on the financial performance of Nigerian-listed oil and gas companies. The information was obtained from the indices report of twelve (12) oil and gas companies listed on the Nigerian Stock Exchange (NSE) market between the periods 2015 - 2019 which covers the period before and after the economic downturn experienced in Nigeria. The data collected were analysed using the pool and cross-sectional data. Descriptive statistics were used to examine the characterization of variables while the pooled least square technique was used to investigate the empirical relationship of the variables. The regression result shows that about 69% of the variation in financial performance is explained by the independent variable of Firm Size, Financial Leverage, Ownership Impetrated and Firm Age. Apart from these variables, there are other factors responsible for the financial performance of listed oil and gas companies in Nigeria. The findings revealed that there is a negative relationship between Firm Size and Ownership Impetrated on financial performance, while Financial Leverage and Firm Age showed a positive relationship on the financial performance of listed oil and gas companies in Nigeria. Based on these findings, the study recommends that businesses adopt a culture of

capitalising and reporting all expenditures on their products.

Yilun (2020), assessed the relationship between firm size, firm age, and firm profitability in China stock market. The study used data from all the public firms in China stock market from 2008 to 2018 and adopted the fixed effect model to examine these relationships. The research revealed a positive relationship between firm size and profitability and a negative relationship between firm age and profitability, which is in consistent with some of the studies conducted in other countries.

Ernest and Rachael (2020) examined the challenges of recent pension reforms in Nigeria as well as the vision achievement rate of PenCom. The study reviewed the literature and published annual reports of PenCom. It was found that reluctance and disbelief by workers to register with Pension Funds Administrator, compliance, benefit inadequacy, low capital formation, non-inclusion of the informal sector, overlapping regulations, and coverage are persistent challenges confronting recent pension reforms in Nigeria. In addition, it was found that the vision achievement index by PenCom is below average after 14 years of operation. The study recommends a synergy between Pension Fund Administrators, Pension Fund Custodians and PenCom to combat some challenges of non-compliance. In addition, these stakeholders should adopt best processes and technologies that would influence workers positively and change the unwillingness and disbelief by workers to register with PFAs.

Abdullahi, Martins, Jude and Ado's (2019) study 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 5 listed consumer good firms in Nigeria from 2007-2016. The data was analysed using descriptive statistics, Pearson correlation and multiple regressions with the help of STATA

version 13. The result shows that the firm size, has a positive relationship with financial performance, firm age also have a positive relationship with financial performance and leverage too has a positive relationship with financial performance.

Kigen (2016) examined the effect of fund size on the financial performance of pension funds in Kenya. The research covered a period of 5 years (2011-2015). The sub-variables used to represent the independent variable fund size were six in number namely, contribution density, accumulated fund assets, number of members, administration costs and investment costs. From the results, it was found that administrative expenses, investment expenses, pension contribution and accumulated fund assets all had significant effect on the financial performance of pension funds in Kenya

Olouch (2013) examined the determinants of the financial performance of pension funds in Kenya considering three factors. The three variables studied were the age of contributors, the contributions received by the pension fund and the net value of assets of the pension funds. The findings from the research indicated that there was not a strong relationship between value of pension fund assets and the performance of the fund in Kenya. This implies that a larger asset base does not automatically means better performance of the fund. The other variables: Age of contributors and the contributions also had a low statistically insignificant impact on the performance of the pension funds.

Hassan and Bello (2013) investigate firms' characteristics from perspective of structure, monitoring and performance elements and the quality of financial reporting measured by modified model of Dechow and Dechev, (2002) of listed manufacturing firms in Nigeria. The study adopted correlational research design with pooled balanced panel data of 24 firms served as sample of the study using multiple regression as a tool of analysis. The result reveals that larger and more leveraged firms in Nigerian manufacturing sector are less likely to manage earnings and increase in sales as well as institutional

investors serve as a monitoring tool of preventing managers from opportunistic behaviour in managing earnings. In addition, profitability and independent directors are positively associated with earnings quality while liquidity is inversely related with quality of financial reporting despite significant at 1% level of significance. In sum, firm characteristics of listed manufacturing firms in Nigeria have impacted significantly on their financial reporting quality. The research recommended that the shareholders of Nigerian listed manufacturing firms should ensure all the seven firm characteristics used in this study keep on improving to decrease manipulative accounting and increase the quality of financial reporting.

2.2 Theoretical review

Theories of the firm try to explain why firms exist, what forms firm and market boundaries and why there are differences in their organisation and performance. Regarding firm's objective it is possible to divide theories of the firm in two groups: those that believe a firm has only one objective and those that think of firms as multi-purpose organizations. The backbone of the group of firm theories that consider firms aim to maximize a single objective is a classic or traditional theory which is focused on company's profit. Although importance of profit is unquestionable, complexity of internal and external variables leads to separation of ownership and managerial functions and consequently development of managerial firm theories.

2.2.1 Fund Accounting Theory

Fund Accounting Theory was first established by the economist William Joseph Vatter in 1947 in his book "The Fund Theory of Accounting and Its Implications for Financial Reports". According to the Dictionary of Accounting Terms, fund theory is a system applied to government organizations as well as non-profit bodies such as charitable organizations and hospitals. The fund includes a group of assets on which restrictions are

placed as they are intended for specific purposes. Each fund has its assets restricted for concrete purposes and liabilities determine restrictions against those assets. (Goncharenko, 2013).

2.2.2 Theory of Financial Intermediation

Theory of Financial Intermediation was first traced to the 1960's in the work of Gurley and Shaw. A financial intermediary is an entity that acts as the middleman between two parties in a financial transaction. It is important that the role of pension funds as intermediaries is examined as well as the way they enhance capital markets. The enthusiasts of current theory of intermediation stated that although pension funds may not offer liquid liabilities, they play an essential part by influencing the structure of securities markets and as a result they enhance the efficiency of the financial systems.

2.2.3 The Stakeholder Theory

The Stakeholder Theory was founded by Edward Freeman in 1984. Stakeholders are groups and individuals who benefit from or are harmed by the decisions and actions of an organization. They include shareholders and other financiers of the business, suppliers and creditors, the workers, consumers, and the community. (Fontaine & Stefan, 2016). The main idea of the stakeholder theory is that the organization should be seen as a collection of stakeholders with the purpose of managing the needs and interests. In the case of a Pension Fund Administrator, the major stake holders are the pensioners and contributors to the retirement savings accounts.

3. Methodology

This research design used in this study was Ex-post Facto research design because the survey started after the fact has occurred without interference from the researcher.

Table 1. List of Pension Fund Administrators (PFAs) Post Recapitalisation

S/No.	Pension Fund Administrators (PFAs)	Year of incorporation
1	Access Pension Managers Limited	2022
2	ARM Pension Fund Managers	2005
3	Crusader Sterling Pensions Limited	2004
4	FCMB Pensions Limited	2004
5	Fidelity Pension Managers Limited	2004
6	Guaranty Trust Pension Managers Limited	2004
7	Leadway Pensure PFA Limited	2004
8	Nigerian University Pension Management Company	2019
9	NLPC Pension Fund Administrators Limited	2005
10	Nigeria Police Force Pensions Limited	2013
11	Norrenberger Pensions Limited	2006
12	OAK Pensions Limited	2006
13	Pension Alliance Limited	2005
14	Premium Pension Limited	2005
15	Radix Pension Managers Limited	2017
16	Stanbic IBTC Pension Managers Limited	2004
17	Tangerine Pensions Limited	2006
18	Trustfund Pensions Limited and	2006
19	Veritas Glanvills Pensions Limited	2007

Source: Notional Pension Commission www.pencom.gov.ng (2023)

The population of the study consists of 20 PFAs operating in Nigeria. The study covered a period of five years, 2018 to 2022. A sample of the funds managed by 10 PFAs in Nigeria was studied using the following criteria: Firm Age, Board Size, Expenditure of the Fund, Density of Contributions and Liquidity. Judgement sampling also known as purposive sampling based on ₦5 billion recapitalisation index fund was used to arrive at First-Ten PFAs selected. The study used secondary data only. The instruments of data collection were annual reports of the Retirement Savings Accounts (RSA) published by the PFAs that manage the Retirement Savings Accounts (RSA) fund. Data was extracted from the statement of income and expenditure for the year and the statement of assets and liabilities as at the year ended. A multiple regression model was used in the study to examine empirically, the firm characteristics that

determine financial performance of the PFAs in Nigeria.

3.1 Model Specification

To assess the nature and strength of the relationship between firm characteristics and financial performance. The study used Density of contributions, Liquidity, Firm age, Board size, and Expenditure of the fund as proxy for firm characteristics while Unit price was used as proxy for financial performance. The study used the following conceptual model:

$$Y = f(x)$$

Dependent variable = $f(\text{independent variables})$, Financial performance = $f(\text{Density of contributions, Liquidity, Firm age, Board size, and Expenditure of the fund})$

$$Y_{it} = \alpha + \beta_1 x_{1it} + \beta_2 x_{2it} + \beta_3 x_{3it} + \beta_4 x_{4it} + \beta_5 x_{5it} + \dots + \beta_n x_{nit} + \mu_{it}$$

Where:

Y= is the dependent variable that is, Financial Performance and was measured by the Unit Price. It is the ratio of the Net total assets of a Pension fund divided by the number of units of the pension funds during a financial year.

α = Constant Term

$\beta_1, \beta_2, \beta_3, \beta_4$ and β_5 ; are regression coefficients or parameters.

x_1, x_2, x_3, x_4 and x_5 ; are independent variables.

x_1 = Density of contribution (DCON),

x_2 = Liquidity (LQDY),

x_3 = Firm age (FAGE),

x_4 = Board size (BOZE),

x_5 = Expenditure of the fund (EXFD)

μ = errors that may occur

i = is a notation for the individual PFAs

t = the time period

The functional relationship among these variables is therefore defined as:

$$Unit_Price_{it} = \alpha + \beta_1 DCON_{it} + \beta_2 LQDY_{it} + \beta_3 FAGE_{it} + \beta_4 BOZE_{it} + \beta_5 EXFD_{it} + \mu_{it}$$

Table 2. Study Variables and Measurement

S/No.	Category of Variables	Variables	Indicator	Source
1.	Dependent	Financial Performance	Unit price of the pension fund at year end. Calculated at Net Asset Value/ no of Units	Fund Statement of Assets and Liabilities as at year end
2.	Independent	Density of Contribution	Amount of contribution in the financial records during the year.	Fund Statement of Assets and Liabilities as at year end
3.	Independent	Liquidity	Cash at bank in the financial records during the year	Fund Statement of Assets and Liabilities as at year end
4.	Independent	Firm Age	No. of years fund has been in existence	PENCOM records
5.	Independent	Board Size	No. of executives and non-executives' directors	PENCOM records
6.	Independent	Expenditure of the Fund	Recorded expenditure of the fund during the year	Fund Income and expenditure statement for the year

Source: Researcher design 2023

4. Results

The results of descriptive analysis for these variables employed are given below. The Standard deviation results indicate that pension schemes had unit prices around the same range. This result also indicates that there

is a large variance in terms of contribution among the larger and smaller pension funds. Based on skewness and kurtosis, Unit Price and Density of Contribution (DCON) seem to be normally distributed.

Table 3. Descriptive Statistics

	UNIT_PRICE	DCON	LDQY	FAGE	BOZE	EXFD
Mean	2.027429	8.363636	3.95E+09	1.13E+11	2.07E+09	2.75E+10
Median	1.967600	8.000000	1.71E+09	5.22E+10	1.18E+09	1.61E+11
Maximum	3.108100	12.00000	4.08E+10	9.74E+11	1.57E+10	5.08E+10
Minimum	1.210000	3.000000	1.06E+08	1.91E+09	1.10E+08	1.06E+08
Std. Dev.	0.458931	2.199935	6.63E+09	1.84E+11	2.77E+09	4.73E+09
Skewness	0.336117	-0.103195	3.567937	3.176598	3.283624	3.467935
Kurtosis	2.349193	2.172717	17.39204	13.03882	14.85174	15.23204
Observation	50	50	50	50	50	50

Source: Researcher computation using STATA 13

The results of the Jarque-Bera test below indicated that all variables were normally

distributed. The p-values in the table are all above the 5% significance level.

Table 4. Normality Test

Variables	Jarque-Bera	Probability
UNIT_PRICE	2.808728	0.245523*
DCON	0.314704	0.754503*
LDQY	0.042235	0.815452*
FAGE	2.332438	0.311543*
BOZE	0.402235	0.979104*
EXFD	0.314704	0.854403*

Source: Researcher computation using STATA *significance at 5% (i.e., $p < 0.05$)

Multiple regression analysis was used hence, Hausman test was conducted to determine whether effect model or random effect model should be used. The probability of chi-square was 0.000, which is less than the 5%

significant level therefore, fixed effect model was appropriate for the analysis. The table below gives the summary of the result of the regression analysis for the fixed effect model:

$$\text{UNIT_PRICE}_{it} = \alpha + \beta_1 \text{DCON}_{it} + \beta_2 \text{LDQY}_{it} + \beta_3 \text{FAGE}_{it} + \beta_4 \text{BOZE}_{it} + \beta_5 \text{EXFD}_{it} + \mu_{it}$$

Table 5. Regression result

Variables	Model			
	Coefficient	Std Error	T-statistics	Probability
C	3.058576	0.896762	3.410688	0.0011*
DCON	-0.381328	0.096753	-3.941267	0.0131*
LDQY	0.093964	0.036793	2.553858	0.0002*
FAGE	0.210682	0.011675	18.04570	0.0001*
BOZE	0.320572	0.911675	3.545707	0.0012*
EXFD	0.047349	0.066918	0.707570	0.4819
R-squared	0.976222			
Adjusted R-squared	0.970853			
S.E. of regression	0.078351			
Prob(F-statistic)	181.8182			
Observation	50			

Source: Researcher computation using STATA 13 *indicate significance at 5% (i.e., $p < 0.05$)

$$\text{UNIT_PRICE}_{it} = 3.0586 - 0.3813 \text{DCON}_{it} + 0.0940 \text{LDQY}_{it} + 0.2107 \text{FAGE}_{it} + 0.3206 \text{BOZE}_{it} + 0.0474 \text{EXFD}_{it}$$

Table 5, Shows the adjusted R-square about 97% of the variations in UNIT_PRICE can be attributed to the firm characteristics, and the remaining 3% variations are because of other factors that are not included in the model. The regression model is statistically significant which is indicated by probability of the F-statistic at 0.0001, which is below the 5% level of significance adopted for the study. The model proved to be a good predictive model. Hence, the independent variables are jointly responsible for the changes in the dependent

variable, Unit Price. Firm Age (FAGE) with a p-value of 0.000 has a significant positive effect on financial performance which is measured by Unit Price. Density of contribution (DCON) has a significant negative effect on Unit price with p-value 0.0131, and Liquidity (LDQY) has a significant effect on Unit Price with p-values of 0.0002 and 0.0131, respectively. Board size (BOZE) with a p-value of 0.0012 has a significant positive effect on financial performance which is measured by Unit Price

while Expenditure of the fund (EXFD) with a p-value of 0.4819 does not have a significant effect on Unit Price. The results showed tests on the differences in means of all variables of the firm characteristics model considered. The positive values implied that the variables under the model are significant in determining the financial performance of PFAs in Nigeria. The findings showed the correlations between the independent variables considered in the regressions: density of contribution, firm age, board size, liquidity, and expenditure of the fund as independent variables in the model and unit price as a measure of financial performance of PFA firms in Nigeria. This finding is consistent with those of Aribaba et al. (2022), Abdullahi et al. (2019), and Kigen (2016).

5. Conclusion

The study conclude that firm characteristics has a significant effect on financial performance, which is indicated by the probability of the F-statistics at 0.0001. The results also shows that Density of contributions, Liquidity, Firm age, Board size, and Expenditure of the fund are jointly responsible for about 97% of the changes in financial performance indicated by the Adjusted R-squared figure of 0.970853. The findings have several theoretical, practical, and regulatory implications. These implications represent the contributions of the study which are expected to benefit the existing body of knowledge within the accounting research, regulators, and providers of accounting services. The important policy implications suggest the need to encourage applying firm characteristics by PFAs to provide effective monitoring of financial performance, especially those with a large board size. These PFAs operate in the business environment of individual ownership domination and control, where managers have greater motivation and opportunity to manage firm characteristics to maximize their private benefits. This suggests that similar efforts in other sectors especially financial institutions would be rewarding in controlling the management of firm

characteristics, to enhance the reliability and transparency of financial performance to promote economic efficiency in the pension industry. The study recommended that great attention should be paid to liquidity since PFAs that have firm age 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, liquidity can increase the shareholders' return on their investment and make good use of the tax advantages associated with borrowing. There is a significant need to have highly qualified employees in the top managerial staff since the age of the PFA has influence on its good financial performance.

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