



DETERMINANTS OF FINANCIAL PERFORMANCE AMONG PENSION FUNDS ADMINISTRATORS IN NIGERIA

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ABSTRACT

All over the world, the need for governments to seek for ways of lessening the fiscal impact of aging populations and to diversify the sources of retirement income has led to a paradigm shift from the old public pension system to the contributory pension system. Despite all the indications about the financial performance of pension fund administrators (PFAs) in the country, the contributors still feel uncertain about the future prospects. This induces this study to examine the determinants of financial performance of PFAs in Nigeria. The population of the study consists of all the twenty-one (21) licensed PFAs in the country as at 31st December, 2019 out of which a sample of twelve (12) were taken based on Krejcie and Morgan (1970) sample size determination table for a study period of 2013 to 2019. The research data gathered for this study are from secondary sources only. The data analysis and estimation technique used was panel regression analysis. The results at 0.05 significance level revealed that: age with coefficient 0.0064 and p-value (0.014) has a positive significant effect on Return on Total Assets (ROTA); contribution density with coefficient 0.9705 with p-value (0.042) also has a positive significant effect on Return on Total Assets (ROTA); firm size with coefficient 1.7858 and p-value (0.000) as well has a positive significant effect on Return on Total Assets (ROTA), Wald X² with coefficient 23.07 showing P-value (0.0003) at 5% level of significance indicated that the independent variables of the study have significant effect on financial performance of PFAs in Nigeria. The study recommends that PFAs in Nigeria should improve upon their experiences, contribution density and sizes in order to enhance their financial performance.



Keywords: Age of PFAs, Size of PFAs, Contribution Density of PFAs and Financial Performance

1. INTRODUCTION

The greatest challenge of pension fund managers globally is to continue to maintain an appropriate level of investments and pay retirement benefits as at when due. Financial performance of pension funds is often cited as an essential factor for ensuring the provision of safe and reliable pension for retirees and pensioners. Nigeria is moving towards financially sound pension systems that will be able to provide adequate pensions in future, at the time when population aging accelerates. The possibility that future pensions would be adequate to serve the ageing societies depends on the ability to secure a viable financing for pension systems. The future of pension fund administrators in Nigeria to the contributors looks uncertain as they fear the safety of their contributions (Muhammad, 2014).

The first and foremost issue of concern is the age of pension funds administrators in Nigeria. The age refers to the period that a pension administrator has being in operation since its inception. According to Robinson (2001), pension fund administrator's ages relate to their efficiency and growth in terms of outreach especially in the early years of operation. The contributory pension scheme in Nigeria is still relatively in early stages hence, there is a concern about the ages and experience of the pension fund administrators in the country. Another issue of concern is the contribution density of pension fund administrators in Nigeria. Some contributors of pension funds are of the opinion that the level of contributions to pension fund is not sufficient to take care of the retirees under the contributory pension scheme and provide replacement income at retirement because of the notion that density of pension contribution earnestly affect performance of pension benefits especially in countries with large informal sector.

Size, which is normally measured by the value of assets has also been identified as one of the factors that may affect the level of outreach of pension funds administrations in Nigeria. Across the world, the size of pension fund is significantly positively linked to its financial performance (Mersland & Strom, 2009). Stakeholders on pension matters are concerned about the size of pension funds administrators in the country.



Previous studies like Kigen (2016), Antoinette (2015), Oluoch (2013), Njuguna (2010), Omodi (2008), Christen (2002) and Woller (2000) have attempted to examine the factors affecting financial performance of pension fund administrators using the prevailing pension schemes in various countries. However, most of the previous studies were found not to be consistent, given the fact that the number of observations were too small to draw statistically viable conclusions. Some other studies (Sarika, 2011; Nyangeri, 2014; Kigen, 2016) were discovered to combine both pension fund custodians with pension fund administrators tending to make their studies inconsistent as more than 60% of the studied pension fund administrators were representing pension custodians using a model that differ from those of other pension fund administrators studied.

Despite all the arguments about seeking a lasting solution to the problem of pension funding in the country, there is very little empirical evidence using Nigeria data to rationalize the discourse. Studies so far conducted in Nigeria on pension fund such as Ije (2001), Gbitse (2006), Suleiman (2006) and Mohammed (2014) seem to ignore the aspect of financial performance of pension fund administrators. To the best of the researcher's knowledge, there is little study conducted in Nigeria to specifically focus on the determinants of financial performance of pension fund administrators and those conducted were conducted before 2019. Thus, the study is a modest attempt to bridge the time gap identified.

The main objective of the study is to examine the determinants of financial performance of pension fund administrators in Nigeria. However, the specific objectives of the study are to: determine the effect of age of pension fund administrators on their financial performance in Nigeria, assess the effect of pension fund contribution density on financial performance of pension fund administrators in Nigeria and investigate the effect of size of pension fund administrators on their financial performance in Nigeria.

2. LITERATURE REVIEW

Conceptual Review

The Pension System

Pension has become a critical issue of concern among stakeholders across the globe. It has attracted attention of governments, employers and employees in many developed, developing and emerging economies of Europe, Africa, Asia and Latin



America as well as Nigeria. The practice in most countries is public pension plans which are defined benefit plans financed as pay-as-you-go (PAYG) basis through adjustable payroll taxes in order to ensure that revenue are sufficient to meet current pension obligations. The traditional trend of the defined benefit system whereby the government has to cater for people at old age through the budgetary provisions is no longer in vogue. Of course, the global trend is total paradigm shift towards defined and fully funded contributory pension scheme (Mohammad, 2014).

Pension Fund Administrator

According to Davis (1995), pension fund administrator may be defined as forms of institutional investors which collect pool and invest funds contributed by sponsors and beneficiaries to provide for the future retirement of beneficiaries. This infers that pension funds provide means by which individuals accumulate savings over their working life in order to finance their consumption needs in retirement, either by means of a lump sum or provision of annuity. It also ensures supply of funds to end users such as corporations, households and governments for investment or consumption. In the Nigerian context, a pension fund administrator is a company licensed by the National Pension Commission to manage and invest the pension funds in the retirement savings account (PenCom, 2019). According to section 55 of Pension Reform Act, 2014 (as amended), the functions of the pension fund administrators are to open retirement savings account for the employees; invest and manage pension fund assets; payment of retirement benefits and accounting for all transactions relating to the funds under their management.

Age of Pension Fund Administrators

The age refers to the period that a pension fund administrator has been in operation since its inception. Financial performance can be related to the age of pension fund administrator. Studies indicate that the pension fund administrator's age relates to their efficiency and growth in terms of outreach especially in the early years of operations (Hauner *et al.*, 2007; Gonzalez, 2007; and CGAP, 2009). Robinson (2001) reports that experienced pension fund administrators in Chile (those with age above six years) are 100 percent financially self-sufficient. Those which are in 3 to 6 years of age are 86 percent financially self-sufficient, while it is 69 percent for those in operation for less than 3 years.



Contribution Density of Pension Fund Administrators

For hundreds of millions of middle-class people around the world, consumption in old age depends on the contributory system promoted by the state, through either meditates or fiscal incentives. However, if a substantial share of participants have a low density of contribution, the pension replacement rate will be inadequate, even if the benefit formulae are generous for a high density participant. Low coverage of contributions is prevalent in many countries, despite mandates. Important examples are China 48% of urban employees contributed in 2005 (Salditt et al 2007), Poland 68% contributed through ZUS, South Korea only 58% of the labour force contributed (World Bank, 2000), Brazil only 49% of the employed contributed, and Mexico only 38% of employed contributed every two months (Rofman and Lucchetti, 2006). Moreover, average coverage rates like these are misleading when a country exhibits uneven density of contribution, since large groups of rural workers or urban self-employed (most of them poor) are effectively example from the mandate, in addition to women engaged in home production. Bucheli et al (2007) use survival analysis to estimate density from individual panel data, starting from incomplete individual historical from Uruguay.

Financial Performance

Profitability has been considered as a major variable in measuring a firm's financial performance (Glautier & Underdown, 2001). Under the capital maintenance concept of income measurement, profit has been considered as a residue available for distribution once provision has been made for maintaining the value of capital (Bodie, 2009). In line with capital maintenance concept, accounting profession has come to recognize changes in value of assets and liabilities in determining the profit of an enterprise (Porwal, 2001). Larson, wild and Chiappeth (1999) defined profitability as ability to give financial rewards sufficient to attract and retain financing. For pension funds that depend solely on their own generated funds to keep their existing level of operations and yet be able to attain their desired level of growth, profitability can be considered as measure of financial performance.

Empirical Review

Age and Financial Performance

Njuguna (2010), Mehdi, Behnez, Mensoureh and Neda (2014), Nyangeri (2014), Zia ur Rahman (2015), Kigen (2016), Fausin, et al (2018) and Ajibade et al (2018) found significant and positive correlation between financial performance and age of



pension fund administrator. In contrary, Woller and Warner (2000), Hartaska (2005), Victoria and Luiza (2010), Sarika (2011) and Muhammad (2014) ascertained that age of pension fund administrator did not significantly affect its financial performance.

Contribution Density and Financial Performance

Woller and Warner (2000), Christen (2002), Nyangeri (2014), Zia ur Rahman (2015), Kigen (2016) and Ajibade et al (2018) concluded that there is a positive significant relationship between fund contribution density and financial performance. In contrary, Hartaska (2005), Olivares-Polanco (2005), Victoria and Luiza (2010), Tom and Mattias (2012), Jim and Bridget (2012) and Muhammad (2014) concluded that there is no significant relationship between fund contribution density and fund financial performance.

Size and Financial Performance

Lefort and Urzuar (2008), Victoria and Luiza (2010), Njuguna (2010) , Jim and Bridget (2012), Oluoch (2013), Nyangeri (2014), in kenya.Mehdi, Behnez, Mensoureh and Neda (2014), Zia Ur Rahman (2015), Kigen (2016), Fausin, Mike & Muchelule (2018), Ofuan&Izien (2016), Ajibade et al (2018), Aduralere (2019), found a positive relationship between fund size and financial performance. In contrary, Woller and Warner (2000), Hartaska (2005), Mersland and Strom (2009), Sarika (2011), Tom and Mattias (2012) and Muhammad (2014) found negative correlation between fund size and financial performance.

Theoretical Framework

The study is guided by the resource-based theory and the stakeholder theory. The resource-based theory of the firm propounded by Werner Feit (1984) is regarded as one of the theories of strategic management that is widely referenced particularly because of its practical relevance to contemporary management practices.

According to Barney (1991), the theory suggests that resources that are available, rare, difficult to imitate and non-substitutable; best position a firm for long term success. These strategic resources can provide the foundation to develop firm capabilities that can lead to superior performance overtime. Resource based view analyzes and interprets resources of the organizations to determine how the organizations achieve sustainable competitive advantage. To this end, all the independent variables of this study: age (bothering on experience), contribution



density, sizes of funds, board size and board composition are unique attributes of firms in the pension industry and they constitute resources which are peculiar to each firm in the industry with which they can get competitive advantage.

According to Freeman (1984), stakeholder can be defined as “any group or individual who can affect or is affected by the achievement of the organization’s objectives”. Unlike agency theory in which the managers are working and serving for the stakeholders, stakeholder theorists suggest that manager in organizations have a network of relationships to serve – this includes the suppliers, employees, customers, communities, government bodies, political groups, trade associations and unions. This theory emphasizes the need for proper management of pension funds in the best interest of all the stakeholders. It also justifies why the various stakeholders on pension matters are concerned about the future of pension fund management in the country particularly in view of the perceived persistent growth in pension fund assets in the last decade and the projected growth in pension assets in years to come. Ages (experiences) of firms, their contribution density, their sizes, their board size and board composition as they affect the ability of pension fund administrators to provide secured replacement income for people in retirement are specific issues of concern to the stakeholders in the industry.

3. METHODOLOGY

This study is based on ex-post facto research design to examine the determinants of financial performance of pension funds administrators in Nigeria. Ex-post facto research design is quasi experimental design that deals with the data that are already in existence which can neither be manipulated nor controlled by the researcher (Ijaiya, 2013). This design was chosen because the data used for analysis were already made available in the published financial statements of all the sampled pension fund administrators in Nigeria and the researcher could neither manipulate nor influence them. The study conducted a survey of all the twenty-one (21) licensed pension fund administrators in Nigeria as at 31st December, 2019. Thus, all the twenty-one (21) licensed pension fund administrators in Nigeria as at 31st December, 2019 constitute the population of the study.

The use of filtering was employed in which a PFA is disqualified if its annual financial reports and accounts are not posted up to date on its website as directed by the Pension Commission in Nigeria. The Krejcie and Morgan (1970) recommendation sample size determination table was also used. This is employed to eliminate the element of biasness and ensure satisfactory degree of



representativeness. Thus, the study excluded nine (9) licensed pension fund administrators in Nigeria from the population and eventually made use of twelve (12) licensed pension fund administrators in Nigeria as the sample size. Therefore, the sample size of this study is twelve (12) of the licensed pension fund administrators in Nigeria as at 31st December, 2019 (See Appendix).

The study made use of secondary data obtained from the annual reports and accounts of the sampled PFA as its major source of data. For the purpose of this study, the annual financial reports and accounts of the selected licensed pension fund administrators in Nigeria were reviewed through a checklist of necessary criteria. Documentary data were also collected via periodic bulletin of the National Pension Commission (PENCOM). To investigate empirically the determinants of financial performance of pension fund administrators in Nigeria. Age, firm Size and contribution density were used as proxies for determinants of financial performance while Return on Total Asset (ROTA) was used as proxy for financial performance. For systematic analysis of the data collected, the study made use of both descriptive and inferential statistical tools of analysis. The inferential statistics used was panel regression analysis. To estimate the models specified, this study ran Fixed Effect Model (FEM) and Random Effect Model (REM) (i.e., Error Composite Model) estimation technique using Hausman test.

Model Specification

To achieve the objectives of the study, the model of Liu (2018) was adapted and modified. The model was presented as:

$$ROE = \alpha + \beta_1 AGE_{1it} + \beta_2 SIZE_{2it} + \beta_3 BOS_{3it} + \beta_4 BCO_{4it} + \mu_{it} \dots \dots \dots (1)$$

Where:

- ROE = Return on Equity,
- AGE= Age of the Firm,
- SIZE= Firm Size, BOS= Board Size,
- BCO= Board Composition,
- α = Intercept of the models,
- $\beta_1 - \beta_4$ = Parameters of the model

The above model was modified and improved upon for the purpose of this study, a new variable was introduced (Contribution Density) because the empirical evidence shows it is relevant in achieving the objectives of the study, given the peculiarity of contribution density to the pension industry while board size and board composition were expunged. Return on Total asset (ROTA) was also introduced to the model to



substitute for REO as a financial performance indicator. Therefore, since the aim of this study is to examine the determinants of financial performance of pension fund administrators in Nigeria, the models for this study is specified thus;

$$\text{FINP} = f(\text{DET}) \dots \dots \dots (2)$$

$$\text{FINP} = (\text{ROTA}) \dots \dots \dots (3)$$

$$\text{DET} = (\text{AGE, SIZE, COD}) \dots \dots \dots (4)$$

f = functional notation relating DET with FINP.

The regression equation to estimate the relationship is as follows:

$$\text{ROTA} = \alpha + \beta_1 \text{AGE}_{1it} + \beta_2 \text{SIZE}_{2it} + \beta_3 \text{COD}_{3it} + \mu_{it} \dots \dots \dots (5)$$

Where:

FINP= Financial Performance, proxy Return on Total Asset (ROTA)

DET = Determinants, AGE= Age of the Firm, SIZE= Firm Size , COD= Contribution Density

α = Intercept of the models (the value assumed by proxies for financial performance when all the independent variable are zero)

$\beta_1 - \beta_3$ = Parameters of the model to be estimated, they represent the slope of the model and measure the amount of change in the dependent variable caused by each of the independent variables.

$\mu_{it} = \varepsilon_{it} + \lambda_i$, ε_{it} = stochastic error term, λ_i = cross-sectionals individual difference (Composite Error)

i, t = i denotes a specific firm and t is the financial year

Decision rule: null hypothesis should be rejected if the p-value is < 5% significance level, otherwise it should be accepted.

Table 1
Variables and Measurements

S/N	Variables	Acronym	Indicators	Sources
	Determinant			
1	Firm Age	AGE	This variable is measured by the years of operation of each of the PFAs considered	Liu (2008)
2	Firm Size	SIZE	This variable is measured by log of revenue	Hartaska (2005)



3	Contribution Density	COD	This variable is measured by retirement savings account balance scaled by previous year's sales.	Muhammad (2014)
	Performance			
1	Return on Total Assets	ROTA	Measured by net income before tax scaled by assets value	Kajola (2008)

Source: Researchers' Survey (2021)

4. RESULTS AND DISCUSSION

Descriptive Analysis

Below table shows the descriptive and normality distribution analysis of the variables considered in this study. Table 2 presents the descriptive statistics of the variables that includes (mean, standard deviation, maximum value, minimum value) and the normality distribution test (skewness, kurtosis and Jarque-Bera) both for the dependent and the independent variables. The dependent variables are financial performance proxy with return on total asset (ROTA), while the independent variable is determinants of financial performance proxy with variables such as; firm age (AGE), firm size (SIZE) contribution density (COD), ranging from 2013 to 2019 for selected Nigerian pension fund administrators.

Table 2
Descriptive Statistics and Normality Distribution Test

Variables	N	Mean	Std Dev	Mini	Max	Skewness	Kurtosis	Jac Br
ROTA	84	0.1656	0.1044	-0.1300	0.4722	1.6160	5.1452	0.0001
COD	84	886.34	466.99	292.89	2299.3	6.0782	42.810	0.0000
SIZE	84	2956.6	1558.5	976.00	7664.0	3.0151	10.091	0.0000
AGE	84	10.333	2.1861	5.0000	14.000	1.1163	6.7035	0.0000

Source: Author's Computations (2021)

Table 2 shows that the financial performance measured through return on total asset has an average value of 0.1656 with a standard deviation of 0.1044, and minimum and maximum value of -0.1300 and 0.4722 respectively. The standard deviation of 0.1054 implies that there is no wide dispersion of the data from the mean value.

The average contribution density of sampled firms is 886.34; with a minimum and maximum value of 292.89 and 2299.3 respectively, while the standard deviation is 466.99 variations from the average value, which reflects the presence of moderate variation across the sampled firms. The average value of firm size of sampled firms is 2956.6; with a minimum and maximum value of 976 and 7664 respectively, while

the standard deviation is 1558.5 variations from the average value, which reflects the presence of moderate variation across the sampled firms. The average number of firm age of sampled firms is 10; with a minimum and maximum number of 5 and 14 respectively, while the standard deviation is 2.1861 variations from the average value, which reflects the presence of moderate variation across the sampled firms. For the normality test, the values of the kurtosis imply that the data does not meet assumption of normal distribution. On the other hand, the coefficients of skewness implies that the data is positively skewed, that is, most of the data are on the right-hand side of the normal curve, thus, the data does not meet the symmetrical distribution. Similarly, Jarque-Bera result shows that the data are not normally distributed as it has values less than the significance level of 0.05.

Preliminary analysis

Multi-collinearity Test

Below table shows the test conducted among the variables used for this study to establish whether there is multi-collinearity problem or not.

Table 3
Multi-collinearity Test - Variance Inflation Factors

Variable	VIF	1/VIF
COD	1.84	0.5435
SIZE	1.66	0.6024
AGE	2.18	0.4593
Mean VIF	1.893	

Source: Authors' Computations (2021)

In table 3 the variance inflation factor of multi-collinearity for detection of possible strong relationship between independent variables, the presence of which violates the assumption of estimation techniques. VIF shows the existence of which the standard error is inflated due to relationship between independent variables. As a general rule of thumb, the higher the VIF the more troublesome or the more likely there is multi-collinearity. On the other hand, a VIF in excess of 5 calls for further investigation. If VIF exceeds 10, it suggests serious multi-collinearity requiring correlation. Gujarati (2004) states that the closer the value to zero, the greater the degrees of multicollinearity while the closer to 1, the greater the evidence that the regressors are not collinear. However, from the result, the value of independent variables exceeds 1, therefore, there is absence of multicollinearity. In lieu of this,



there are no multicollinearity issues between the independent variables within this model as all the VIF's are less than 10.

Table 4
Breusch-Pagan/ Cook-Weisberg Test for Heteroskedasticity

Model	Chi²	P-value
ROTA	2.09	0.1769

Source: Author's Computations (2021)

Heteroskedasticity shows in a model if the variances of the error- term of the different observations are different. This study analyzed Breusch-pagan test to check if there is problem of heteroskedasticity. The Breusch-pagan tests of the null hypothesis that the error variances are all equal against the alternative that the error variance is a multiplicative function of one or more variables. The result of P-value (0.1769) is greater than 5% significant level, the null hypothesis was rejected. Therefore, these models do not face any heteroskedasticity problem. This implies that the variations between independent variables are fairly small.

Regression Results

Table 5 below shows the linear relationship of the determinants of financial performance of pension funds administrators in Nigeria, with the use of panel regression analysis. The table shows the result of the pooled OLS, fixed-effects and random-effects of the model and post estimation test of Breusch and Pagan Lagrangian multiplier test (poolability) and hausman test.

Table 5
Regression Analysis

Variables	ROTA		
	Pooled OLS Model	Fixed-effects Model	Random-effects Model
Constant	-1.3416 (0.542)	-0.9349 (0.531)	-1.2444 (0.402)
Contribution Density (COD)	0.9762** (0.038)	2.0669 (0.473)	0.9705** (0.042)
Firm Size (SIZE)	1.2411*** (0.000)	2.0424*** (0.000)	1.7858*** (0.000)
Firm Age (AGE)	0.0019** (0.040)	0.0099** (0.028)	0.0064** (0.014)
F-stat	19.19*** (0.0000)	9.55*** (0.0007)	



Wald X ²			23.07*** (0.0003)
R-square (R ²)	0.7516	0.5165	0.7128
Error term (S.E)	0.0072	0.0726	0.0720
Hausman Test		6.11 (0.1065)	
Breusch and Pagan Lagrangian Multiplier Test	71.66*** (0.0000)		

*, **, *** : denotes Significant at 10%, 5% and 1% level respectively.

Bracket: denotes P-value, while the value denotes Coefficients

Source: Author's Computation (2021)

Poolability test was conducted with the use of Breusch and Pagan Lagrangian multiplier test to check the model that is appropriate between pooled OLS model and random-effects model, the result shows that random-effects is appropriate for the model as indicated by P-value 0.000 each less than 0.05 significant level.

Hausman was also computed to check which model is appropriate between fixed-effects and random-effects, the result shows that random-effects model is appropriate for the model as indicated by P-value (0.1065) higher than 0.05 level of significance. The results obtained from the model indicates that the overall coefficient of determination R-squared (R²) of the model shows that the equation has a good fit with 71% of systematic variations in ROTA is explained by the independent variables in the equation.

In terms of the sign of the coefficient that signify the determinants of financial performance of pension funds administrators in Nigeria, it shows that all variables concur with *a priori* expectation with positive sign, this implies that there is direct relationship between independent variables and financial performance indicators. The objectives of the study were achieved with the sign and magnitude of the coefficient of each variable.

Overall, the result of the Wald X² (23.07) with P-value (0.0003) at 5% level of significance, implies that factors that determine the pension funds administrators' financial performance in Nigeria have significant effect on their financial performance.

Discussion of Findings

From the empirical analysis and the hypothesis tested, the result showed that firm characteristics (Age, contribution density and size) has significant positive effect on the Financial Performance among Pension Fund Administrators in Nigeria.



Specifically, age of the firm has positive significant effect on financial performance of pension funds administrators in Nigeria. This result is consistent with the findings of Sarika (2011), Nyangeri (2014), Kigen (2016), Mehdi et al (2014), Zia ur Rahman (2015), Fausin *et al.*, (2018), Ajibade *et al.*, (2018), as the studies also found positive relationship and significant, but against the result of Hartaska (2005), Woller & Warner (2000), Tom & Mattias (2012), Victoria & Luiza (2010), Oluoch (2013) and Liu (2018).

The result also supports the resource-based theory and stakeholders' theory. The resource-based theory helps managers of firms to understand why competencies and work experience can be perceived as a firm's most important asset and at the same time to appreciate how those assets can be used to improve business performance. Resource based view of the firm accepts that attributes relating to past experiences, organizational culture and competencies are critical for the success of the firm (Hamel et al., 1996). The stakeholder theory attempts to address the group of stakeholders deserving and requiring management's attention. The primary stakeholders of pension fund are the workers and retirees under the contributory pension scheme in Nigeria. Other stakeholders include the government, households, capital markets, money markets, etc. This theory emphasizes the need for proper management of pension funds in the best interest of all the stakeholders.

Furthermore, findings shows that contribution density has positive significant effect on financial performance of pension funds administrators in Nigeria. This result is consistent with the findings of Woller and Warner (2000), Nyangeri (2014), Kigen (2016), Zia ur Rahman (2015), Ajibade et al (2018), as the studies also found positive relationship and significant, but against the result of Hartaska (2005), Tom & Mattias (2012), Victoria and Luiza (2010), Jim and Bridget (2012) and Muhammad (2017).

Lastly, the result shows that size of the firm has positive significant effect on financial performance of pension fund administrators in Nigeria. This result is consistent with the findings of Lefort and Urzuar (2008), Victoria and Luiza (2010), Ofhan and Izien (2016), Nyangeri (2014), Kigen (2016), Mehdi *et al.*, (2014), Zia ur Rahman (2015), Fausin et al (2018), Ajibade *et al.*, (2018) and Aduralere (2019), as the studies also found positive relationship and significant, but against the result of Hartaska (2005), Woller and Warner (2000), Tom and Mattias (2012), Mersland and Strom (2009), Bikker and Dreu (2006) and Liu (2018). The finding of this study is in accordance with assumption of stakeholders' theory and the resource-based theory.



5. CONCLUSION

Based on the results of hypotheses tested, the study concludes that firm age is a positive significant determinant of financial performance of pension fund administrators in Nigeria. This means that number of years of operation and experiences of pension fund administrators is an important determinant of their financial performance. Results of the hypotheses tested also concludes that pension fund contribution density constitutes a positive significant determinant of financial performance of pension fund administrators in Nigeria, suggesting that pension fund administrators in Nigeria should make use of pensioners contribution judiciously so as to enhance their financial performance. Furthermore, the study concluded that size of pension fund has a positive significant effect on financial performance of pension fund administrators in Nigeria. This implies that the size of pension fund administrators in Nigeria would have a positive impact on the level of financial performance of pension fund administrators in Nigeria.

6. RECOMMENDATION

Based on the conclusion drawn from this study, it is recommended that Nigerian pension fund administrators should always consider the years of establishment of their firms and experience in their investment decision as well as performance measurement decision making processes. Furthermore, it is recommends that Nigerian pension fund administrators should increase the level of their contribution density in order to generate adequate fund for investment in worthwhile projects to improve their financial performance and finally, it is recommended that pension fund administrators in Nigeria should increase their capital investment such as: investment in property, plants and equipment, financial instruments, merger and acquisition, so as to improve their financial performance.

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Appendix

List of Sampled Pension Fund Administrators in Nigeria

S/NO	PFA's	DATE OF INCORPORATION
1	Aiico Pension Managers Ltd	February, 2005
2	IGI Pension Fund Managers Ltd.	October, 2004
3	NLPC Pension Fund Administrators Ltd	January, 2005
4	Stanbic IBTC Pension Managers Ltd.	October, 2004
5	Apt Pension Fund Managers Ltd	December, 2004
6	Crusader Sterling Pensions Ltd.	October, 2004
7	Future Unity Glanvills Pensions Ltd	June, 2007
8	IEI-Anchor Pension Managers Ltd	November, 2004
9	Leadway Pensure PFA Ltd.	October, 2004
10	Legacy Pension Managers Ltd (PFA)	April, 2005
11	Premium Pension Ltd.	December, 2005
12	Trust Fund Pensions Ltd.	December, 2004

Source: Generated by the author from the population of the study (2021)