PENSION REFORMS AND ITS IMPLICATIONS ON RETIREES' WELFARE; EXPERIENCE FROM THE INVESTMENT PERFORMANCE OF SELECTED PENSION ADMINISTRATORS IN NIGERIA 2014- 2023

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Abstract

Pension reform is pivotal in shaping the economic stability and welfare of retirees in Nigeria. This study explores how pension fund assets, pension fund expenditures, and pension fund contribution density induced retiree welfare. The analysis with the aid of panel data, underscores that robust pension fund assets, characterized by diversified and well-managed investments, enhance financial security for retirees by ensuring consistent and adequate disbursements. Conversely, inefficient management and allocation of these assets can exacerbate financial vulnerabilities among the enrollee. Moreover, pension fund expenditure, encompassing both administrative costs and benefit payouts, significantly influences the sustainability and efficacy of pension schemes. High administrative costs can erode the fund's value, reducing the benefits available to retirees. On the other hand, prudent expenditure management enhances fund longevity and benefit adequacy. Lastly, pension fund contribution density, referring to the regularity and monetary value or amount of contributions made by workers, directly correlates with the size of retirement benefits. Higher contribution density typically results in more substantial pension benefits, thereby improving retirees' welfare. In Nigeria, enhancing retiree welfare through pension reform necessitates strategic management of fund assets, cost-efficient expenditure practices, and policies that encourage consistent and substantial contributions. This holistic approach can mitigate poverty among the retirees, promote economic stability, and foster a dignified post-retirement life. In support of this idea, Onaolapo (2022) described financial inclusion as a practice that ensures that all participants in an economy can easily access, be available, and use the formal financial system. According to Kassim (2023), A financial system that is inclusive provides credit to all "bankable" persons and enterprises, insurance to all eligible individuals and businesses, and savings and payment services to everyone. Financial inclusion, in Kassim's opinion, is just the availability of financial services to all people, not their likelihood of using them all. People ought to have access to a variety of financial services as their standard of living grows.

Keyword: *Pension Reforms, Retirees 'welfare, Investment Performance of PFAs*

Jel code: E21, E44, G23, I31,132

INTRODUCTION

Prior to the 2004 Pension Reforms, a number of problems with pension fund administration in Nigeria existed, including the Federal and State governments' failure to pay pensions and gratuities on time or at

all. For example, as of December 2005, the backlog for pensions was estimated to reach over N2.56 trillion. In fact, millions of elderly Nigerian workers live in extreme poverty and are frequently ignored or underprovided for after retirement, making pension fund administration a difficult problem (Iwegbu, 2020). It is undeniable that the nation ran a defined benefit plan prior to the Pension Reform Act of 2004. This program was primarily unfunded and non-contributory, and it also caused a significant over time accumulation of pension debt. The government's incapacity to make timely and sufficient budgetary preparations, along with increases in salaries and pensions, were the main reasons why the plan to this aim became unsustainable (Ajibola, 2021). It is imperative that pension funds be prudently administered firstly because of the need to ameliorate the conditions of the would-be beneficiaries, whom after serving their fatherland in various possible ways or after rigorous and active services for decades deserve to get something reasonable to fall back to, and sustain their economic or financial needs for the rest of their lives. Secondly, because of the tendencies of these funds to be invested in strategic sectors of the country's economy, with a view to ensuring steady growth and development in the critical sectors of the economy.

There are number of studies on pension fund and economic growth and development, and investment performance; However, most of the previous studies (Ezugwu and Itodo 2019; Eme et al 2019; Adesodun and Rapheal 2020; Iwegbu 2020; Apriyanto and Firdiansjah 2021; Fapohunda 2021; Eme and Uche 2021; Zubair 2023 and Abubkar 2023) examined the subject matter in Nigeria did not specifically studied the impacts of pension fund assets, pension fund expenditure and contribution density in relation to pension administrators performance (Retirees Welfare). This leaves the subject matter in Nigeria as not being fully researched on. In view of this, this study seeks to specifically examined how pension fund assets, pension fund Expenditure as well as how pension fund Contribution Density has induced performance of pension Administrators (Retirees Welfare) in Nigeria, with a view to providing answers to the following research questions below.

1.1   Research Questions

To what extent has the pension fund Assets influence the performance of Pension Fund Administrators (PFAs) as relate to Retirees Welfare in Nigeria?

How does the pension fund Expenditure affect the performance of Pension Fund Administrators (PFAs) as relate to Retirees Welfare in Nigeria?

To what extent does the pension fund Contribution Density induce the performance of Pension Fund Administrators (PFAs) as relate to Retirees Welfare in Nigeria?

2.0   LITERATURE REVIEW

2.1 Conceptual Review
The concepts discussed here are those related to overview of Pension Fund Governance, new contributory Pension scheme and Pension Fund Management and Investment Performance.

2.1.1 Overview of Pension Fund Governance
Designs for the conceptual and operational framework for pension fund investment governance are accessible at the macro (regulatory) and micro (funds) levels, drawing from prior literature. A public

pension fund's board of administration is in charge of managing and controlling the pension fund, which is governed by legislation and oversight (Miinga, 2016). An examination of institutional structures, government intervention, administrative operations, coverage, withdrawals, and sustainability can provide insight into the efficiency and efficacy of pension fund investment governance World Bank (2013).

As a result of vast sums of money from taxpayers and public employees are at stake, governance structures are important to the government, employees, and those who produce value for pension systems. Additionally, the roles played by boards of directors in these structures are crucial, as are pension fund inconsistencies with value maximization. Public members who sit on pension fund boards, members of the pension systems themselves who may be chosen as trustees or elected by participants, and government officials who are appointed by other government officials or who hold ex officio positions are examples of officials that hold positions on pension fund boards. The ability and obligation to make investment decisions on behalf of the fund, as well as the relative representation of these various groups on each pension fund board, are determined by the statutes and charters of the pension systems in which these members are chosen.

Andonov, Hochberg and Rauh (2016) divided board committee into 9 categories, board members are classified into three categories: state, public, and participant. Members of the state board are representatives from the state, a county, a city, or another suitable public body. State trustees can be elected to the board by plan participants (State-elected), appointed by a government executive, or function as ex officio members by virtue of holding another government position (State-ex officio). Trustees who are either retired plan participants or currently employed make up the board. Board members who represent plan participants may be elected by other plan members (Participant-elected) or appointed to the board (Participant-appointed), in which case they will serve as ex officio members. Public trustees are not employees of the state or of the pension plan; rather, they are members of the general public. Members of the general public board may be chosen by plan members (public-elected), appointed to the board (public-appointed), or function as ex officio members (public-ex officio). The majority of pension fund board members fall into one of the following five categories, which comprise the remaining nine: state-appointed, state-exempt, participant-appointed, participant-elected, and public-appointed.

2.1.2 New contributory Pension Scheme

The most recent pension law in Nigeria was passed in 2004 under the Pension Reform Act, which was put into effect to solve issues with the previous pension systems. Bonds, bills, and other securities in the capital market are among the investment options for pension funds that are highlighted in Section 86 of the act.

The ancient defined benefit (DB) plans, under which the government assures civil servants of a predetermined level of retirement benefits, have undergone modifications due to demographic shifts, unfunded future liabilities, increased budget deficits, and reduced pension payouts. These factors forced governments to gradually replace pay as you go (PAYG) plans with fully or partially funded pension plans, or contributory systems, in which fund members bear the risk rather than the government. (Tsado and Gunu, 2011).

The Pension Reforms Act (PRA) 2004 is a contributory plan that is privately run by Pension Fund Administrators (PFAs) and completely funded on the basis of individual accounts. The new pension plan is set up so that each employee's monthly payment is withdrawn from their pay and their employer matches that contribution, both of which are then deposited into the appropriate retirement savings account. According to the contributory act, the assets gathered for the pension funds must be invested in stocks, bonds, bills, and other securities listed in section 86 of the act, from which the retirees receive returns. These assets are initially retained to cover future pension liabilities, and each employee must open a Retirement Savings Account (RSA) in his name with the Pension Fund Administrator (PFA) of his choice as required by law (Zubair, 2016).

A typical employee's minimum monthly payment under this plan is 15% of their basic salary, as both employers and employees are required to contribute a minimum of 7.5 percent of the employee's basic salary, respectively (Pencom, 2004). The Pension Commission (2016) reports that during the first quarter of 2016, the number of contributors to the pension industry increased by 1.75%, from 6,950,503 at the end of 2015 to 7,071,791 at the end of the same quarter the previous year.

Numerous academic works have examined the difficulties that Nigerian investors and pension fund assets have faced recently. One of the main issues is the lack of investment outlets, which is related to the recapitalization of the financial sector, which includes banks and other financial institutions (Tsado and Gunu, 2011; Pencom, 2008). But in order to ensure future income from savings in a pension plan—especially one that is contributory—savings must be invested wisely through investment outlets, such as the capital market, which can guarantee low risk, fund security, and higher returns because it boosts productivity and generally supports economic growth and development.

2.1.3 Pension Fund Management and Investment Performance

A portion of the vast international investment management sector, pension fund management refers to the professional management of investment portfolios by fund managers, who oversee,

among other things, unit trusts and investment policies (Tonks, 2005). The Pension Reforms Act (PRA) 2004 is a contributory plan that is privately run by Pension Fund Administrators (PFAs) and completely funded on the basis of individual accounts. In 2004, PFAs were created as financial companies with the exclusive goal of saving money to cover their employees' future pension obligations. They also have the responsibility of investing pension contributions to guarantee a reasonable return.

Fund managers, according to Tonks (2005), are people (or businesses) who work in the investment of clients' assets, specifically managing investment portfolios. They are expected to possess superior investment skills, which they achieve through information processing abilities. Fund managers also help to achieve economies of scale in the process of managing client assets, so it may be effective to pool these funds under the management of a single fund manager.

Pension assets may be invested in any of the following: bills and other securities issued or guaranteed by the government and CBN; bonds, debentures, redeemable preference shares, and other debt instruments issued by corporate entities and listed on the Stock Exchange Market (Tsado & Gunu, 2020).
In addition to managing investment portfolios for short-term payment responsibilities and helping with the planning of long-term liability fulfillment, the Pension Fund optimizes revenue. There are reputable management companies for pension plans that handle investment placement and contributions from workers.

The Employer Pension Fund and Financial Institution Pension Fund are the two types of pension fund institutions that fall under the purview of the Law on Pension Funds. While the financial institution pension fund was created to make money from the fees that participants charged, the employers fund was created to ensure that employees would have a steady source of income after they retire (Handoko, 2015).
Ogbu (2012) listed a few of the difficulties in managing pension funds in Nigeria, including those related to technology, safety pension funds, corporate governance, pension arrears, policy implementation, and the establishment of fund pension training schools. He went on to highlight other issues affecting the Nigerian Pension Fund System, such as the operators' and regulators' incapacity to manage the system's demands, the one-size-fits-all approach created by singled investment funds, the lack of an investment guarantee for invested funds, and the investment portfolio guidelines' excessive leaning toward income.

The experiences of other countries' social security systems have demonstrated that pension fund management has a major impact on the domestic capital market and the channeling of financial resources for industrial developmental activities, according to Venkatesh and Vanishree (2014).

According to Iwegbu (2020), pension funds comprise a variety of investment portfolios, including investments in real estate, money markets, government securities (federal and state), foreign equities, foreign money market securities, private equity, and mutual funds. These investments all have an impact on financial development, which in turn spurs economic growth.

According to Brown, Draper, and McKenzie (1997), trustees in the pension fund industry believe that performance is consistent on a quarterly and annual basis. They explained that, for a given period, pension funds that perform in the top quartile are more likely to do so again in the following period. Additionally, a fund manager must possess the skills that will be needed over time to achieve consistent positive performance. Negative performance may indicate that a fund is surviving because of institutional factors like immunity from periodic performance reviews, which permits a fund with persistently poor performance. Continuous oversight and management is still necessary, though, if a sizable portion of pension funds continue to perform poorly and no corrective action is taken. Varying pension fund sizes result in varying investment portfolios, which in turn produce varying average performance (Nanda and Atahau 2020). They proposed that bonds and deposits accounted for the highest share of large pension fund investments among investment instruments.

2.2 Theoretical Review

2.2.1 Theory of Capital Accumulation

Renowned economists Karl Marx and Adam Smith established the theory of capital accumulation in 1776, which holds that capital accumulation is necessary for economic expansion and advancement. This theory highlights the cyclical nature of investment, production, and reinvestment of profits in order to increase capital stock over time. Capital accumulation is crucial for expanding businesses, creating wealth, and driving overall economic progress. However, in the context of Nigeria's pension fund reforms and retirees' welfare, the theory of capital accumulation plays a significant role. Pension funds, as a form of capital investment, rely on the principle of capital accumulation to generate returns and ensure the financial security of retirees. By channeling contributions into various investment vehicles, pension funds participate in the process of capital accumulation, aiming to grow assets over the long term. Nevertheless, understanding the theory of capital accumulation can provide insights for policymakers and stakeholders involved in pension fund reforms in Nigeria. By aligning pension fund strategies with principles of capital

accumulation, such as prudent investment and wealth creation, reforms can be tailored to enhance pension fund performance and ultimately improve retirees' welfare. Emphasizing sustainable capital growth through diversified investments and efficient management can bolster the resilience and effectiveness of pension funds in meeting the retirement needs of Nigerian citizens (Nitzan & Bichler, 2000; Oluitan & Falode, 2020). Similarly, exploring the theory of capital accumulation offers a valuable perspective on the dynamics of wealth creation, investment, and economic progress. The harnessing the power of capital accumulation within pension systems can pave the way for a more secure and prosperous future for retirees in Nigeria (Oluitan & Falode, 2020).

2.3.1. Empirical Review

When Ezugwu and Itodo (2020) looked at portfolio analysis of pension fund investments in Nigeria, they found that equity, which made up the largest percentage of the portfolio, also had the highest return, coming in at N2.8528 billion. Furthermore, a direct correlation between the quantity of an asset in a portfolio and its return is suggested by the return's steady increase over the weight of the asset classes in the portfolio.

Additionally, Oluitan and Falode (2020) carried out an empirical examination of pension fund assets influencing Nigerian infrastructure finance, and the study's conclusions showed that PFA significantly and favorably affects INFF. Capital expenditure and PFA ratio had a positive and significant impact on INFF, and GDP and PFA ratio were found to have a considerable positive impact on INFF. On the other hand, inflation significantly and negatively affects INFF.

With a focus on Stanbic Bank Group Securities Company Limited, Olweny (2021) examined the impact of capital structure theories on pension fund management in Kenya. The study's conclusions demonstrate that desired ratios and propositions are not correlated with the firm's size or value.

Nwanna and Ogbonna (2022) conducted a study that analyzed the development of pension management in Nigeria and its significance to the country's economy. According to the study, Nigeria's economic growth was significantly enhanced by pension management, as measured by the number of retirement savings accounts, total pension assets, and pension contributions.

Adesodun and Raphael (2022) looked into the reasons and remedies of Nigeria's pension dilemma. According to the paper, the reform mandates that all employers with five or more employees sign up for the program; membership from the formal and informal sectors is expected to total at least 25 million; PenCom as it is currently organized is unable to collect and handle the necessary data; and a separate central data management authority must be established.

The impact of pension funds, asset size, and return on assets of investment portfolio pension funds were also examined by Handoko (2023). The results for Indonesia showed that the size of the asset and the kind of pension fund had a considerable impact on the investment portfolio, and that the pension fund was significantly impacted by all of the independent factors at the same time. Moreover, the kind of pension fund has a major and positive impact on the investment portfolio; return on assets (ROA) has no discernible impact on return on investment; and the pension fund's asset size has a major and positive impact on the investment portfolio. Multiple regression analysis results demonstrated that the types of assets, pension funds, and return on assets (ROA) all had a substantial impact on the investment portfolio at the same time.

In an effort to close the highlighted gap, this study explicitly looks at how pension fund assets, pension fund expenditures, and pension fund contribution density have affected the performance of pension administrators in Nigeria with regard to retiree welfare.

2.3.2 Conceptual Framework

Independent variables   **Dependent variable**
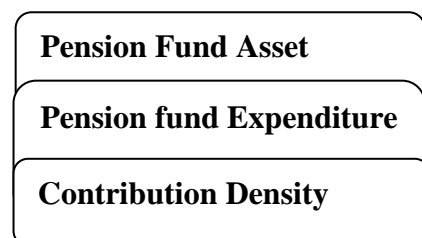
| Pension Fund Asset |

| Pension fund Expenditure |

| Contribution Density |

| Retiree Welfare |
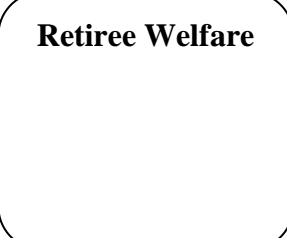
Source: Researcher's Conceptual Model, (2024)

The first figures above indicate the relationship between the dependent and independent variables in relation to the study specific objectives.

3.0   METHODOLOGY

This study uses an ex post facto research design, which is defined by Ajibade Jayeoba & Aghahowa (2023) as an investigation conducted after the fact without the researcher's intervention. Ten out of the twenty-two pension fund administrators in Nigeria who are available are the targeted population. Judgement sampling also known as purposive sampling was used for the 10 Pension Fund Administrators. The sampling techniques will be used in choosing sample size of 10 Administrators from the periods of 2014 to 2023 for a balanced panel data of 10 years. The 10 companies were selected because of their availability and accuracy of data for ten years. The study used secondary data only.

Panel data regression analysis was used for investigating the efficacy of pension fund Assets on the performance of pension Administrators within the period of 2014 and 2023 with the aid of STATA 10. The technique of panel data estimation was chosen since it addresses the heterogeneity related to individual particular factors. Additionally, panel data provide more meaningful information, greater variability, reduced co-linearity across variables, greater degrees of freedom, and increased efficiency by merging time series of cross-sectional observations. Additionally, panel data reduces the potential for bias that arises from aggregating individual pension administrators (Gujarati, 2015). Additionally, it enhances empirical analysis in a way that might not be achievable if cross-sectional or time series data alone were used.

3.1 Variables Measurement

S/N	VARIABLES	MEASUREMENT	PREVIOUS AUTHORS	Expected Relationship Between X and Y
	INDEPENDENT:			
1.	Pension Fund Assets (PFA)	Logarithm of the total amount of Pension Funds Investment Assets.	Ezugwu and Alex (2014), Oluitan and Falode (2020), Handoko (2015)	Positive ($_+$)
2.	Pension fund investment Expenditure (EXP)	Recorded expenditure of the fund during the year.	Ajibade et al (2022), Oluitan and Falode (2022)	Negative (-)

3.	Density of the Contribution (CONT)	Amount of Contribution in the financial records during the year.	Ajibade et al (2022)	Positive (+)
	DEPENDENT			
	Retiree Welfare	This is proxied with consumer price index	Handoko (2022)	
	CONTROL			
	Size	is the natural logarithm of total assets of PFAs	Zubair (2022),	positive (+)

3.2 Model Specification

This study was modelled according to the work of Eme et al (2020), Venkatesh and Vanishree (2022), Abubakar (2022) and Hassanudin et al (2023). Specifically, this study adapted the model of Abubakar (2017) which examined pension fund investment in Nigeria from an Islamic Perspective. In other to achieve the study objectives, this study adopts the theory of capital accumulation theory as theoretical framework. Therefore, the performance of the selected Pension administrators as relate to retirees welfare was proxy by consumer price index (CPI) while the adopted independent varaibles include; Pension Fund Assets, Pension fund Expenditure and Pension fund contribution density while PFAs Size (SIZ) was adopted as control variable.

In a bid to test for the significance of each of these variables, the below econometric models was formulated:

$$CPI_{i,t} = f(PECS) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.3.1$$
$$CPI = PFA_{i,t} + PIEX_{i,t} + PCD_{i,t} + SIZ_{i,t} \ldots\ldots\ldots\ldots\ldots\ldots.3.2$$

Where:
$CIP_{i,t}$ = Consumer price index in year t
$PFA_{i,t}$ = Pension fund Asset of the selected Pension administrators in year t
$PIEX_{i,t}$ = Pension fund Expenditure of the selected Pension administrators in year t
$PFCD_{i,t}$ = Pension Fund contribution density of the selected Pension administrators in year t
$SIZ_{i,t}$ = Size of the selected Pension administrators in year t
$$CPI_{i,t} = \beta_0 + \beta_1 PFA_{i,t} + \beta_2 PIEX_{i,t} + \beta_3 PCD_{i,t} + \beta_4 SIZ_{i,t} + \mu_{i,t} \ldots\ldots\ldots\ldots\ldots\ldots\ldots.3.3$$

4.0 RESULTS AND DISUSSION

This section presents the analysis of the data collected through secondary source (audited financial statement of the selected pension Administrators) and the discussion of findings on the research objectives using a panel data regression analysis.

4.1. Descriptive Statistics of the Variables

Table 4.1

Variables	Obs	Mean	Std. Dev.	Min	Max
Cpi		.0904	.1087	0.0151	.5502
Pfa	100	.0836	.0198	0.0114	.0950
Piex	100	.0525	.0329	0.0124	.0865
Pcd	100	.0824	.0105	0.0212	.0919
Siz	100	.0820	.0194	0.0232	.0938

Source: Author's computation (2024).

The dependent and explanatory factors for a subset of pension administrators are shown in the above table with descriptive statistics. The table provides details about the traits that every piece of gathered data demonstrates. The consumer price index value, as shown in the above table, has a mean value of .0904, a standard deviation value of .1087, and minimum and maximum values of .0151 and .5502, respectively. Additionally, the chosen pension administrators' mean pension fund asset was .0836, with a standard

deviation of .0198. A minimum and maximum values of .0114 and .0950 respectively. Additionally, the table reveals that the chosen pension administrators' mean pension fund expenditures were .0525, with a standard deviation of .0329. The values range from .0124 to .0865, minimum and maximum, respectively. This suggests that the sampled pension Administrators' average pension fund expenditure was .0525, and the standard deviation value shows that the figure deviates by .0329 on both sides from the mean. For the sampled pension administrators, the mean contribution density to the pension fund was .0824, with a standard deviation of .0105. The values range from .0212 at the minimum to .0919 at the maximum. This implies that pension fund contribution density of the sample stood at .0824 on average. The sampled pension administrators' pension fund contribution density values differ by .0105 from the mean value on both sides, according to the standard deviation. The sampled pension administrators' size had a mean of .0820 and a standard deviation of .0194. The values range from .0232 to .0938, minimum to maximum. This suggests that the sample size of pension administrators was .0820. The sampled size's value deviates by .0194 from the mean value on both sides, according to the standard deviation.

Pair wise Correlation Analysis among the variables

Table 4.2

varPb	Cpi	Pfa	Pfex	Pfcd	Siz
Cpi	1.0000				
Pfa	0.2126	1.0000			
Pfex	-0.2006	0.0381	1.0000		
Pfcd	0.5454	0.1591	0.2943	1.0000	
Siz	0.0624	0.0613	0.1053	0.0324	1.0000

Source: Author's computation (2024).

In order to determine whether the level correlations between each pair of dependent and independent variables do not pose the threat of multi-colinearity and prevent the issue of incorrect model specification, the above table summarizes the results of correlation analyses among the

adopted variables. It is important to highlight that the pairwise correlation values in the table above suggest that there is no multicolinearity among the variables used in the model, implying that the independent variables were not significantly associated with one another. This is supported by (Gujarati ,2015).

Hausman specification result
Table 4.3

	Fixed	Random	Difference	S.E.
Pfa	.8625	.7056	.1568	.0579
Pfex	1.0933	.9493	.1439	.0550
Pfcd	.0018	.0121	.0103	.0189
Siz	.2975	.3204	.0228	.0106

Source: Author's computation (2024)

 Test: H0: difference in coefficients not systematic
  chi2(4) = 13.52 Prob>chi2 =   0.0036

The statistical data for the estimated panel's random and fixed effects are shown in Table 4.3 above, respectively. The chi2 value of 13.52 with 0.0036 probability, which was below the 0.0500 significant margin, is revealed by the Hausman test result. which suggest that the fixed effect model would be the most appropriate one to estimate for this research. As a result, the fixed effect was chosen as the suitable model and understood to be such.

Regression Results
Fixed-effects (within) regression
Table 4. 4

CPI	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Pfa	8625	.2908	2.97	0.004	1.4431	.2820
Pfex	-1.0933	.2734	4.00	0.000	-.5474	1.6392
Pfcd	.0018	.0460	0.04	0.968	.0938	.0901
Siz	.2975	.0510	5.83	0.000	-.1956	.3994
Cons	.0591	.0040	14.71	0.000	.0511	.0671
R-square	58.					
F-statistics	0.0000					
Observation	100					
Number of groups	10					
Obs per group	10					

Source: Author's computation (2024)

The panel data regression (fixed effect) result shown in the above table has a coefficient of R^2 of 0.58, meaning that 58% of the variation in the sampled pension administrators' performance as it related to retiree welfare as represented by the Consumer Price Index (CPI) could be explained by the explanatory variables that were adopted. This suggests that the stochastic element of the model, which represents the error terms, accounted for the remaining 42% of the variation.

Given its probability value of 0.0000, the F-statistics can be considered significant at 1%, suggesting that all of the accepted independent factors were jointly important in explaining retiree welfare. This suggests that the model has a respectable degree of goodness of fit.

The constant C's coefficients have a value of .0591. This implies that retiree welfare, represented by the Consumer Price Index (CPI), will increase by.0591 units if all the explanatory factors remain constant. This demonstrates that the sampled pension managers' retiree wellbeing will react as expected, notwithstanding changes in the explanatory variables.

As a component of the adopted regressors, Pension Fund Asset exhibits a positive coefficient of.8625 and was statistically significant at the 5% level, as shown in table 4.4 above. This suggests that, under the assumption that other predictor variables remain constant, a unit change in Pension Fund Asset will imply a.86256 unit increase in the Retiree welfare. These results are consistent with the findings of Eze (2022) and Ibrahim (2023), who also reported a positive relationship between Pension Fund Asset and RETI.

According to table 4.4 above, when all other regressors are held constant, an increase of one unit in pension fund expenditure will result in a decrease of 1.0933 units in the retiree welfare of the population under study. Pension fund expenditure, as part of the adopted regressors, reveals a positive coefficient of -1.0933 with Retiree welfare and it was statistically significant at 1%. This is consistent with research by

Job (2021), which similarly found a negative correlation between pension fund expenditure and pension administrators' performance as indicated by the consumer price index.

According to table 4.4 above, the Pension Fund Contribution Density has a positive relationship of .0018 with the consumer price index but is statistically insignificant at 5%. This means that an increase of unit .0018 in retiree welfare will be explained by a unit change in the pension fund contribution density, assuming that all other regressors remain constant. According to table 4.4 above, the size of the chosen PFAs has a positive coefficient of.2975 and is statistically significant at the 5% level. This suggests that a unit change in the size of the chosen PFAs will, implicitly, explain for a.2975 unit increase in the retiree welfare in a scenario where other predictor variables are maintained constant.

5.1   CONCLUSION AND RECOMMENDATION

The study's empirical results indicate that the effectiveness of pension fund administrators in terms of retiree welfare is heavily dependent on their handling of pension fund assets, as this will significantly impact their performance. This is supported by the positive coefficient found for the surrogates that were adopted for pension fund assets.

Taking into account the inferential statistic results, the empirical results also demonstrate that pension fund expenditures have a significant impact on the population's performance as it relates

to retiree welfare. A reported negative coefficient on pension fund investment expenditure necessitated the use of effective management measures to improve the performance of the chosen PFAs. The contribution density of pension funds was found to have a positive coefficient. This suggested that if enrollee contribution density is taken into consideration, the chosen PFAs could significantly enhance their performance in relation to retiree wellbeing. PFAs' growth prospects are heavily reliant on their size. The findings of this study also have relevance to earlier research projects undertaken by other academics, as mentioned in the preceding chapter.

5.2   Recommendations

In the light of the above, the following recommendations were put forward for consideration: Appropriate microenvironment management methods must be implemented in order for Nigerian PFAs to achieve

increased and sustained profitability through interest revenue from pension fund investments, with the goal of maximizing return on investment and promoting retiree welfare.

To lessen the impact of pension fund spending on the population's profitability while taking enrollee wellbeing into account. The PFAs must implement a reliable macroeconomic variables predictor in order to manage pension fund expenses with respect to interest rate and inflation rate volatility, taking into account the reported negative coefficient. This will allow them to absorb unanticipated shocks.

In conclusion, pension fund contribution density needs to be taken seriously in order to guarantee that PFAs function better in terms of enrollee welfare. This will fervently prevent the occurrence of pension fund investment mismatch.

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