Effect of pension fund attributes on pension fund administrators' financial performance in Nigeria

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Abstract
This paper examines the effect of pension fund attributes on Pension Fund Administrator's (PFAs) financial performance in Nigeria. This is quantitative study that uses secondary data sourced from the annual reports of the PFAs under consideration. The study's population comprised 19 PFAs operating in Nigeria. Using a census sampling technique, the total population of the PFAs in Nigeria were studied. The research spanned for a period of ten years (2013-2022). Multiple regression was employed to analyze the data with the aid of SPSS version 27. The findings of this study indicate that corporate age and corporate revenue has positive and significant influence on the financial performance of PFAs in Nigeria. While corporate expenditure has a significant negative impact on the financial performance of PFAs in Nigeria, as such has inverse relationship with the PFAs financial performance. The study recommended that individuals close to retirement should consider opting for older pension fund managers. In addition, fund managers should actively pursue strategies to boost pension fund revenue, ensuring the sustainability of their business and minimize its expenditure.

Keywords: Financial performance, Pension Fund attributes, Pension fund administrators

1. Introduction

Countries, including Nigeria, have experienced swift expansion and the establishment of pension funds. Due to the crucial nature of transactions within pension funds, countries have devoted particular focus to the development of these entities. These funds often act as catalysts for the growth of capital markets and, concurrently, function as alternatives to traditional banking institutions (Grünewald, 2021).

It is inherent for the government to cater for the well-being of the elderly, given their significant dedication to active, productive, and youthful years in the service of the nation (Bravo & Herce, 2020). The necessity to support retirees after their active service has resulted in the establishment of a systematic contribution approach, where funds are accrued and disbursed as a lump sum to retirees (Adewumi, 2020). In this context, the government has enacted pension laws to aid both employees and the broader economy (Onwuka, 2021; Eke, et al., 2021). The simultaneous monthly contributions from both employers and employees accumulate into a substantial amount of money, which can be invested for future use, generate fruitful returns, and contribute to economic growth. Consequently, expert professionals are employed to oversee these funds through dedicated institutions known as pension funds, primarily focused on managing savings related to retirement (kwor, &, Nkwagu, 2020; OECD, 2021).

The effectiveness of pension funds is crucial as they are designed to support retirees and, consequently, play a substantial role in the economy of any nation. Their sustenance is often depending on governmental directives; otherwise, employees might be reluctant to

acknowledge them. The duty of any Pension Fund Administrators (PFAs) is to safeguard the assets entrusted to them. According to Mesa-Lago et al. (2021) and Eke et al., (2021), PFAs are required to assess their financial performance against optimal benchmarks over the long term.
Workers generally in both public and private sectors are expected to live comfortable life devoid of any form of dependency after their successful retirement from active service, making pension funds an important issue to both current and potential retirees. In a report by PenCom, (2022), there is over N13,6 trillion worth of pension funds asset in 2022 fiscal year, but there is still an arguable scenario that has led to an avoidable poor standard of living of retirees within the period of inactive service (IMF, 2022)
Six years earlier, in December 2016, the pension assets in Nigeria were recorded at N6.1 trillion (Béland and Weaver, 2018; & Moses, 2020). This signifies a remarkable growth of 129.5% in just six years. Furthermore, these funds are actively invested in international stocks. Pension funds have played a role in fostering the growth of the capital markets, similar to that of banks (Salawu & Ololade, 2018). Certain attributes of pension funds indicate favorable financial outcomes (Afolabi & Erasmus, 2023; Eke et al., 2021; & Bravo et al., 2021). Creating value stands as a fundamental goal for every company, and this principle extends to Pension Fund Administrators (PFAs) striving to maintain competitiveness and attain outstanding corporate performance by leveraging specific organizational characteristics (Afolabi & Erasmus, 2023) Research indicates that the value generated by PFAs can significantly influence the financial well-being of numerous retirees during their inactive year (Michael et al., 2022). This research seeks to present insights into some of these attributes as they affect the performance of pension funds.
Several studies have explored the impact of various firm attributes, such as contribution density, firm size, and age, board quality and size, number of contributors, and branch network, on the valuation of PFAs, albeit with limited coverage (Michael et al., 2022; Gimi & Mohammed, 2022; Ahmed & Opusunju, 2022). Additionally, other research has delved into the influence of, and credit, liquidity, and market risk on pension fund performance (Omwaka & Malenya, 2020; Yassin, 2021). However, there appears to be a scarcity of studies that attempt to combine the effects of a combination of these attributes (corporate age, expenditure and revenue) on the PFAs financial performance. It is within this context that this study aims to investigate how the financial performance of PFAs are affected by corporate age, expenditure, and revenue in Nigeria.

2. Literature Review

One of the globally recognized retirement benefits is a pension, which refers to the sum disbursed by a government, company, or any entity to an employee upon completing a designated period of service, becoming too old, incapacitated, or reaching the statutory retirement age (Bogataj et al., 2018). Conceptually, a pension is a recurring payment provided to a retiree as compensation for services rendered during the active age, established through a legally enforceable contractual agreement, payable during the inactive age (Odo et al., 2021). A pension fund is a financial reserve created to secure funds for disbursing pensions to employees upon their retirement after their employment tenure. Serving as an institutional investor, a pension fund allocates significant financial resources to both public and private enterprises. Typically, employers are responsible for overseeing and managing pension funds, which essentially function as investment pools designated to support employees' retirement (Michael et al., 2022).

The advent of the new Contributory Pension Scheme brought about the establishment of Individual Accounts known as Retirement Savings Accounts (RSAs) for employees. According to the law, each employee is mandated to open a personal RSA with a chosen PFA. The performance of the financial reserves that are maintained and managed by the PFAs is sometimes influenced by some of the PFA's characteristics. This study focuses on evaluating the financial performance of these RSA funds. it considers specific pension fund characteristics such as corporate age, corporate expenditure, and corporate revenue.

Corporate Age

The duration of the PFAs is sometimes associated with its success. Indicating the length of time, it has been operational. As such, the duration of the pension funds corresponds with the tenure of the PFA responsible for its oversight. Achieving profitability for pension funds typically necessitates a significant period since they predominantly involve medium to long-term investments. According to Tijjani's (2014) research, the financial viability of a PFA tends to grow with its age. Nevertheless, it is crucial to recognize that some specific funds' financial performance may decline over time as a result of adequate management (Ngugi, et al., 2019; Oluoch, 2013).

Corporate Expenditure

This pertains to the expenditure in line with supervision and administration of the fund (Nasiha, et al., 2020). These expenses may be attributed directly to the fund and include fees for trustee services, professional valuation, and custodial services. Additionally, expenses encompass charges for investment management, benefit calculation, costs related to record retention, legal or consulting services, bank charges, member communications, and audit fees, among other costs as approved by PenCom (Kesinro, et al., 2018).

Corporate Revenue

This denotes the total earnings generated in the specified reporting duration. Public pensions typically secure their finances from two main origins: contributions and returns on investments (Were, et al., 2018). A pension plan requires regular contributions, and employees may have the option to make additional contributions, with these being deducted from their wages. Income from investments encompasses dividends from stocks, profits from property sales, and interest accrued from savings or money market accounts, as exemplified by Ahmed and Opusunju (2022).

Financial Performance

Indicators such as market share, sales revenue, competitive advantage, profitability, loyalty, and customer satisfaction are key metrics that reflect a company's performance. The effective distribution of equity within pension funds is a topic widely discussed in the literature (Oladeinde, 2021). Since a significant portion of assets is often invested in stocks, the vulnerability of pension wealth increases with market price fluctuations of stock. The substantial stock market gains in the 1990s resulted in reduced premiums and, in some instances, breaks in contributions for sponsors of pension plans (Ajibade, et al., 2018; and Ibish et al., 2020).

Theoretical Review

Resource-Based View (RBV) Theory

The Resource-Based View (RBV) theory was primarily developed by Jay Barney, an American management scholar in 1991. RBV theory suggests that a firm's sustained competitive advantage and superior financial performance are driven by its unique bundle of internal resources and capabilities. RBV theory recognizes that as firms age, they accumulate resources, capabilities, and knowledge that contribute to their competitive advantage. Older firms may have established brands, customer relationships, and market presence that can influence their financial performance positively. Additionally, the age of the corporation may also reflect its experience in managing financial resources and navigating market dynamics. The theory also posits that effective allocation of corporate expenditure is critical for enhancing financial performance. This suggests that firms should invest in resources and capabilities that are valuable, rare, inimitable, and non-substitutable (VRIN). Strategic expenditures that enhance operational efficiency, innovation, employee skills, and customer relationships can contribute to sustainable competitive advantage and improved financial results. Furthermore, according to RBV theory, corporate revenue generation reflects the effectiveness of a firm's business model, market positioning, and value proposition. Sustainable revenue streams are often associated with superior products or services, strong customer relationships, and effective marketing and distribution channels. The theory highlights the importance of aligning revenue generation strategies with the firm's unique resources and capabilities to maximize financial performance.

Empirical Review

Omwaka and Malenya (2020) conducted a study to assess the performance and financial risk of pension schemes in Kenya. The research used a survey approach involving pension schemes in the country, intending to analyze the impact of liquidity, credit, market, and operational risk on the performance of these pension schemes. A descriptive research design was adapted focusing on all the pension schemes in the country. A sample size of 303 pension schemes was chosen through a simple random sampling technique. The results indicated that credit, market, operational, and liquidity risk had negative effects on pension scheme performance in the country. Consequently, the research concluded that financial risks had an adverse influence on the performance of pension schemes in the country. The study recommended that managers of pension schemes in Kenya should implement conventional risk management practices, adopting proactive approaches and staying informed by developing regulatory insight to mitigate legal risks.

Yassin (2021) aims to investigate the effects of firm characteristics and a diverse board on company performance. The research used 384 observations as a sample from the Egyptian Stock Market during the period under review (2016 to 2018), employing statistical analyses to identify independent variables influencing the company’s performance. Specifically, the study explores the conditional impact of seven variables on company performance. The results indicate that company size, CEO duality, board size, and financial leverage significantly and positively impact the company’s performance. On the other hand, the variables of board independence and audit quality shows no significant correlation with firm performance. The study suggests that larger companies with low leverage, larger boards, and no CEO duality tend to demonstrate superior financial performance compared to other firms.

Adekoya et al. (2022) conducted a research which focused on examining the connection between Firm attributes and the value of PFAs in Nigeria. The research sought to investigate how firm attributes influence the value of PFAs. net asset value per unit was used to measured the value of PFAs within the Nigerian context. Sample of fifteen (15) PFAs were selected using purposive sampling technique out of the 22 PFAs in operation between 2011-2020. Secondry data was used for the study. The analysis encompassed both descriptive and inferential (multiple regression) methods. The results indicated that firm attributes collectively had a significant impact on the net asset value per unit of the PFAs. Consequently, it was concluded that the value of PFAs in Nigeria can be enhance by the firm attributes. The study recommended that PFAs prioritize stakeholders' interests, including shareholders and contributors, by leveraging the identified firm attributes to enhance performance and create value.

Adeoye and Lourens (2023) conducted a study to assess the suitability of financial performance among PFAs in Nigeria. The research aimed to investigate the influence of various factors, including inflation rate, pension costs, total contributions, and revenue, on benefits paid and cash inflow. Additionally, the study explored how securities, federal government bonds, inflation rate, and total contributions affected investment income. The analysis employed Autoregressive Distributed Lag (ARDL) cointegration and multiple regression methods. The results revealed that, both in the short-term and long-term analyses, increased PFAs costs led to a decrease in what is paid to retiree as benefits. Furthermore, higher costs of administrative were associated with increased benefits paid, as elevated administrative costs facilitated a rise in contribution inflow. Additionally, investing in federal government bonds, particularly Treasury bills, contributed to higher investment income. Securities were found to enhance investment income, and a positive correlation was observed between the inflation rate and investment income. The policy implications underscore the importance of reducing pension costs associated with pension fund management and encouraging greater investments in tangible assets to mitigate the impact of inflation.

Gap in Literature

Numerous empirical investigations have explored the connection between the characteristics and features of PFAs. The number of contributors, board size and board quality, contribution density, and branch network, are part of these characteristics resulting in diverse findings. Similarly, other research endeavors have delved into assessing financial risks, including market, liquidity, operational, and credit risk, and their impact on pension scheme performance. In Addition, several studies have scrutinized the influence of inflation rates on pension fund value, revealing conflicting results. However, there is a noticeable scarcity of studies that attempt to comprehensively examine the combined effects of other attributes, such as corporate age, corporate revenue, and corporate expenditure, on the financial performance of pension fund administrators in Nigeria. This study is specifically designed to address this gap in the existing research.

3. Methodology

This study employed panel data to investigate the relationship between pension fund attributes and financial performance of PFAs in Nigeria. The study population comprised 19 PFAs currently operating in Nigeria, and the research spanned for a period of ten years, from 2013 to 2022. Using a census technique, the total population of the PFAs in Nigeria were studied, considering corporate age, corporate expenditure, and corporate revenue. Secondary data was utilized due to the quantitative nature of the study, from the published reports of the PFAs in Nigeria. Both descriptive and inferential analyses were conducted. Multiple regression was employed to analyze the data with the aid of SPSS version 27. Return on Investment (ROI) was used as a measurement for financial performance of the PFAs.

Model Specification

The following model was used:

$Y=f(x)$

$Fpf= \alpha + \beta 1\ Age + \beta 2\ Exp + \beta 3\ Rev + e$

Where:

Fpf - Financial performance

Age - Corporate Age

Exp - Corporate Expenditure

Rev - Corporate Revenue

α- Constant Term, while $\beta 1$, $\beta 2$, and $\beta 3$ are regression coefficients or parameters;

ε - Error term

4. Results and Discussion

Data Presentation and Analysis

Table 1: Descriptive Statistics

	Mean	Std. Dev.	N
Fpf	4.2122	.49955	190
Exp	4.08	.454	190
Age	4.24	.417	190
Rev	4.1940	.43022	190

Based on the provided descriptive statistics table, one can analyze the central tendency and dispersion of four variables: Fpf, Exp, Age, and Rev and their mean are 4.2122, 4.08, 4.24, and 4.1940 respectively.

The mean values provide insights into the average level of each variable, while the standard deviations indicate the degree of variability or dispersion around the mean. A higher standard deviation suggests greater variability in the data. The sample size of 190 observations in the variable provides a sufficient amount of data for analysis.

The standard deviation of Fpf is 0.49955, indicating that the values of Fpf are relatively spread out around the mean. While that of Exp is 0.454, suggesting that the values of Exp also have some degree of variability. In addition, the standard deviation of Age is 0.417, indicating a moderate level of dispersion around the mean. Whereas, that of Rev is 0.43022, suggesting that the values of Rev are also moderately spread out. The sample size for all variables is 190, indicating the number of years and companies representing 190 observations in the variables.

Table 2: Correlations

		Fpf	Exp	Age	Rev
Pearson Correlation	Fpf	1.000	-.567	.510	.602
	Exp	-.567	1.000	.481	.524
	Age	.510	.481	1.000	.572
	Rev	.602	.524	.572	1.000
Sig. (1-tailed)	Fpf	.	.008	.003	.000
	Exp	.008	.	.014	.006
	Age	.003	.014	.	.000
	Rev	.000	.006	.000	.

Source: Researcher’s Computation (2023)

Table 2 contains the output of the correlation analysis. Financial performance was found to be negatively and significantly associated with corporate expenditure (r = -0.567, sig. = 0.008). This finding implies that an increase in corporate expenditure leads to a corresponding decrease in financial performance. This is in line with the study carried out by Adeoye and Lourens (2023). In addition, corporate age has positive and significant relationship with financial performance (r = 0.510, sig. = 0.003). This shows that an increase in the age of a pension fund administrator will lead to a corresponding increase in its financial performance. This finding concurs with the research conducted by Adekoya et al. (2022). Furthermore, Table 2, also indicates corporate revenue has positive and significant relationship with financial performance (r = 0.602, sig. = 0.000). This indicates that an increase in the cash inflow of a pension fund administrator will lead to a corresponding increase in its financial performance.

Regression Results

The summary of the model (Table 3) indicates that 86.8% of the variance in corporate financial performance is accounted for by the interaction of corporate age, corporate expenditure, and corporate revenue (R^2 = 0.467), leaving the remaining percentage to be explained by other factors.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Sig. F Change
1	.683a	.467	.460	.000

a. Predictors: (Constant), Exp, Age, Rev
Source: Researcher's Computation (2023)

The model's adequacy was evaluated using the ANOVA statistical tool, and the results are presented in Table 4 below. The output indicates that the model's fitness is highly satisfactory (F-value = 73.530, sig = 0.000). This result is consistent with Field's (2009) assertion that a significant and large F-value is a criterion for establishing the fitness of a model.

Table 4: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.703	3	9.901	73.530	.000[b]
	Residual	33.932	252	.135		
	Total	63.635	255			

a. Dependent Variable: Fpf
b. Predictors: (Constant), Exp, Age, Rev

Discussion

The findings of this study indicate that corporate age has a significant influence on the financial performance of PFAs in Nigeria. This suggests that increase in corporate age is associated with a corresponding improvement in corporate financial performance, likely due to the accumulated experience over the years. This outcome implies that older pension fund administrators are more likely to be financially successful than their younger counterparts. Tonks (2005) and Adekoya et al. (2022) supported this finding in research on pension fund management, highlighting that the value of a pension fund tends to increase over time due to contributions and investment returns. Additionally, Tijjani (2012) observed a positive relationship between corporate age and the financial sustainability of pension funds.

Moreover, the study reveals that corporate expenditure has a significant and negative impact on the financial performance of PFAs in Nigeria. This implies that as corporate expenditure increases, the financial performance tends to decrease. The implication of this result is that pension fund managers should strive to minimize corporate expenses, including those related to transportation, travel, and benefits-in-kind, among other factors.

Furthermore, the study noted that corporate revenue significantly influences the financial performance of PFAs in Nigeria. This discovery is in line with Njuguna's (2010) research, which suggested that fund size plays a considerable role in the financial performance pension funds. Further support for this finding comes from Kigen (2016), who argued that fund size significantly affects the financial performance. Tijjani (2012) supported this outcome by observing that corporate net income has a positive and significant impact on the financial sustainability of pension funds in Nigeria. However, it is essential to note that this finding contradicts the results of Olouch's (2013) study, which stated that the contributions received had a statistically weak and insignificant impact on the pension funds' performance.

5. Conclusion and Recommendations

Conclusion

This research explored the relationship between financial performance of PFAs in Nigeria and pension fund characteristics on the performance of PFAs in Nigeria. The findings indicate that corporate age, and corporate revenue, significantly influence the financial performance of PFAs in Nigeria. But corporate expenditure was identified as having a adverse effect on the financial performance of PFAs in Nigeria. As a result, the study concludes that corporate age, corporate expenditure, and corporate revenue play significant roles in influencing the PFAs financial performance in Nigeria.

Recommendations

Given the significant positive impact of corporate age on the financial performance of PFAs in Nigeria, the study recommends that individuals nearing retirement consider opting for older pension fund managers. This choice may enhance the likelihood of prompt claim settlement upon retirement. Furthermore, considering the significant positive effect of corporate revenue on the financial performance of PFAs in Nigeria, it is advisable for fund managers to actively pursue strategies to boost pension fund revenue, ensuring the sustainability of their business. However, in light of the notable negative effect of corporate expenditure on the performance of PFAs, it is recommended that the fund managers should strive to minimize corporate expenses, including those related to miscellaneous, benefits-in-kind, among other areas.

Suggestions for Further Study

Examining and comprehending the sustained underperformance of pension fund managers stands as a significant and contemporary topic within the realm of pension fund research, warranting further investigation. As such, there is potential for future studies to explore pension fund variables that were excluded in this research, such as the age of contributors, to gain an understanding of the dynamics at play in the pension fund landscape.

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