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- V. Literature Review
- VI. Methodology
- VII. Results and Discussion
- VIII. Conclusion and Recommendations
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MODERATING ROLE OF PENSION FUND SIZE ON THE RELATIONSHIP BETWEEN FINANCIAL RISK MANAGEMENT AND PERFORMANCE OF TIER 3 (SMALL) PENSION FUNDS ADMINISTRATORS (PFAS) IN NIGERIA

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ABSTRACT

This study examines the moderating role of pension fund size on the relationship between financial risk management and the performance of Tier 3 (small) Pension Fund Administrators (PFAs) in Nigeria. Using a longitudinal research design, the study analyses data from 2012 to 2022, focusing on 19 licensed PFAs under Nigeria's Contributory Pension Scheme (CPS). The sample comprises small PFAs with assets below ₦300 billion, selected through purposive sampling to ensure data availability and reliability. Data were sourced from audited financial reports and analysed using pooled Ordinary Least Squares (OLS) regression, with diagnostic tests for multicollinearity, heteroscedasticity, and model fit. Findings reveal that small PFAs exhibit weaker financial performance (mean ROA and ROE of 5.8%) compared to larger counterparts, with higher liquidity risk (34%) and greater susceptibility to external shocks. Foreign exchange risk (FER) and capital adequacy risk (CAR) significantly enhance ROA and ROE, while fund size positively moderates these relationships, underscoring economies of scale. However, liquidity and operational risks remain critical challenges for small PFAs. The study recommends tailored strategies to strengthen risk management practices, including simplified credit risk guidelines, enhanced liquidity reserves, and incentives for capital accumulation. Policymakers are urged to promote consolidation and growth strategies to help small PFAs leverage economies of scale. This research contributes to the literature by addressing the gap in understanding how fund size moderates' financial risk-performance dynamics in small PFAs, offering practical insights for regulatory frameworks and industry practices to ensure the sustainability of Nigeria's pension system.

Keywords: Pension Fund Administrators (PFAs), financial risk management, fund size, Nigeria, small PFAs, risk-performance relationship.

1.0 INTRODUCTION

Pension Fund Administrators (PFAs) are critical in mobilizing household savings and channelling them into long-term investments, fostering financial stability and economic growth (Adegbite, 2020). In Nigeria, the Contributory Pension Scheme (CPS), introduced through the 2004 Pension Reform Act, transitioned the pension system from a defined-benefit to a defined-contribution model, positioning PFAs as key managers of pension funds (Oluwole, 2022). However, their effectiveness depends on their ability to manage financial risks, including credit, market,

liquidity, operational, foreign exchange, and capital adequacy risks (Ezeoha, 2021).

Small PFAs, particularly Tier 3 institutions, face significant challenges in mitigating these risks due to limited resources and access to advanced risk management tools (Okonkwo & Eze, 2023). Unlike larger PFAs, which benefit from economies of scale and diversified portfolios, smaller PFAs struggle with resource constraints, making them more vulnerable to economic uncertainties and weaker financial performance (Udeh, 2022).

Despite the growing importance of PFAs in Nigeria's financial sector, there is a notable research gap in understanding how fund size moderates the relationship between financial risk management and performance, especially for small PFAs (Adeleke, 2023). This study addresses this gap by exploring the moderating effect of fund size on risk-performance dynamics, providing insights for policymakers and practitioners to enhance the sustainability and resilience of small PFAs (Okafor, 2023).

Small Pension Fund Administrators (PFAs) in Nigeria face significant challenges in managing financial risks, which adversely affect their performance and ability to safeguard contributors' savings. These risks include credit risk, market risk, liquidity risk, operational risk, foreign exchange risk, and capital adequacy risk. Smaller PFAs struggle with limited resources and access to advanced risk management tools, making them more vulnerable to external shocks and economic uncertainties. While larger PFAs benefit from economies of scale, diversified portfolios, and better resource allocation, small PFAs often lack these advantages, leading to weaker financial performance and higher liquidity risks. Despite the growing importance of PFAs in Nigeria's financial landscape, there is a notable gap in research examining how fund size moderates the relationship between financial risk management and performance, especially for small PFAs. This study seeks to address this gap by exploring the moderating role of pension fund size on the risk-performance dynamics of small PFAs in Nigeria.

The primary objective of this study is to assess the moderating role of Pension fund size on the relationship between financial risk and performance of small PFAs in Nigeria. The specific objectives are to: i. Examine the impact of financial risk management on the performance of small Pension Fund Administrators (PFAs) in Nigeria. ii. Investigate the moderating role of pension fund size on the relationship between financial risk management and the performance of small PFAs.

Research Questions framed and answered were: i. How do financial risks such as credit risk, market risk, liquidity risk, operational risk, foreign exchange risk, and capital adequacy risk affect the performance of small PFAs in Nigeria? ii. How does pension fund size moderate the relationship between financial risk management and the performance of small PFAs?

To guide this investigation, the following null research hypotheses were stated: H₁: Financial risks (credit risk, market risk, liquidity risk, operational risk, foreign exchange risk, and capital adequacy risk) have a significant impact on the performance of small PFAs in Nigeria. H₂: Pension fund size significantly moderates the relationship between financial risk management and the performance of small PFAs in

Nigeria.

It addresses a critical gap in the literature by exploring the moderating role of fund size in the relationship between financial risk management and the performance of small Pension Fund Administrators (PFAs) in Nigeria. This contributes to the broader understanding of financial risk management and pension fund performance, particularly in emerging markets.

The findings offer actionable insights for small PFAs to enhance their risk management practices and improve financial performance. This is essential for ensuring the sustainability and resilience of these institutions, which play a vital role in managing retirement savings.

The study provides recommendations for policymakers and regulators to develop tailored frameworks that support small PFAs. These include simplified regulatory guidelines, incentives for capital accumulation, and strategies to promote consolidation, all of which can strengthen the sector. By improving the financial stability of small PFAs, the study benefits contributors, retirees, and the broader Nigerian economy. Safeguarding retirement savings and promoting economic growth are key outcomes of this research.

The motivation for this study arises from the critical role PFAs play in Nigeria's financial sector, particularly in managing retirement savings and driving economic growth. Small PFAs, however, face unique challenges due to limited resources and difficulties in effectively managing financial risks, which adversely affect their performance. Despite their importance, there is a lack of empirical research focusing on how fund size influences the risk-performance relationship for small PFAs. This study seeks to fill this gap by providing practical solutions to enhance the operational efficiency and financial stability of small PFAs. Ultimately, the research aims to contribute to the long-term sustainability of Nigeria's pension system and ensure the financial security of millions of Nigerian workers.

2.0 LITERATURE REVIEW

2.1 Conceptual Framework

Financial Risk Management involves identifying and managing risks such as market, credit, liquidity, and operational risks that could harm a pension fund's financial health. Small Pension Fund Administrators (PFAs) in Nigeria face challenges in managing these risks due to limited resources and expertise (Amenc et al., 2021).

Pension Fund Performance is the measures of how well a PFA generates returns, ensures sustainability, and meets future payouts to retirees. Metrics like return on investment (ROI) and risk-adjusted returns

are used to evaluate performance. Small PFAs in Nigeria struggle due to limited investment options, regulatory hurdles, and economic instability (Merton, 2024).

Pension Fund Size refers to the total assets under management (AUM). Larger funds benefit from economies of scale, diversified portfolios, and advanced tools, enabling better risk management and performance. Smaller funds, like Tier 3 PFAs in Nigeria, face challenges such as limited capital and higher costs, making it harder to compete (Rudolph & Schwetzler, 2023).

Moderating Role of Pension Fund Size is the concept that examines how fund size influences the relationship between risk management and performance. Larger funds can implement risk management strategies more effectively due to greater resources, while smaller funds often struggle to achieve similar outcomes (Ujunwa & Salami, 2020). Small/Tier 3 PFAs in Nigeria are smaller pension funds regulated by the National Pension Commission (PenCom). They cater to informal sector workers and face unique challenges like low contributions, high operational costs, and limited access to capital, which hinder their performance and risk management capabilities (Olayinka & Oluwatosin, 2019).

Emerging Markets Context looks at Nigeria's pension industry operates in an emerging market characterized by economic instability, underdeveloped financial systems, and regulatory challenges. These factors exacerbate the difficulties small PFAs face in managing risks and achieving optimal performance.

2.3 Critical Analysis of Existing Research

Existing research has extensively explored the relationship between financial risk management and pension fund performance. However, most studies focus on large pension funds in developed economies, with limited attention to small PFAs in emerging markets like Nigeria. While studies in Nigeria have examined regulatory frameworks, investment strategies, and macroeconomic factors, they often overlook the role of financial risk management and its interaction with fund size (Olayinka & Oluwatosin, 2019; Ujunwa & Salami, 2020).

The size of a pension fund is a critical factor influencing its risk management capabilities and performance. Larger funds benefit from economies of scale, advanced tools, and diversified portfolios, while smaller funds face resource constraints that limit their ability to implement sophisticated strategies (Rudolph & Schwetzler, 2013). Despite this, few studies have explored the moderating role of fund size, particularly for small PFAs in Nigeria.

2.4 Research Gaps

Most research focuses on large pension funds, leaving

a gap in understanding the unique challenges faced by small PFAs in emerging markets. While fund size is acknowledged as important, its moderating effect on the relationship between risk management and performance remains underexplored, especially for Tier 3 PFAs.

Existing research is predominantly conducted in developed economies, which may not be directly applicable to emerging markets like Nigeria due to differences in regulatory environments and economic conditions. Many studies rely on cross-sectional data, which limits the ability to establish causal relationships. Longitudinal studies are needed to better understand the dynamics of risk management and performance over time. The literature is predominantly quantitative, with limited use of qualitative methods to explore the perspectives of pension fund managers and stakeholders.

2.5 Empirical Review

Empirical research highlights the challenges small financial institutions face in emerging markets. Studies in Pakistan and Kenya show that larger firms perform better due to enhanced risk management and investment capacities (Atif & Qaisar, 2015; Muiga & Muriithi, 2017). In Nigeria, small PFAs face significant challenges in managing risks like credit, market, liquidity, operational, foreign exchange, and capital adequacy risks (Ali et al., 2020). For example: Small PFAs struggle with thorough credit assessments and portfolio diversification (Ogunleye & Soyemi, 2014). Limited resources hinder their ability to hedge against volatility (Central Bank of Trinidad and Tobago, 2022). Smaller funds hold fewer liquid assets, making it harder to meet withdrawal demands (Nikolaou, 2009). Weak internal controls and technological infrastructure increase vulnerability to errors and failures (Saeed, 2014). Limited hedging options complicate investments in foreign-denominated assets (Omondi, 2019). Maintaining sufficient reserves is challenging during financial stress (Udom & Eze, 2018).

The above highlights the critical concepts, gaps in existing research, and the theoretical and empirical foundations of the study. Small PFAs in Nigeria face unique challenges due to their size and operating environment, which hinder their ability to manage risks and achieve optimal performance. By addressing these gaps, this study aims to provide actionable insights for improving the sustainability and resilience of small PFAs, ultimately safeguarding the retirement savings of millions of Nigerians.

2.6 Theoretical Frameworks

The Resource-Based View (RBV) is adopted for this study, emphasizing that an organization's unique resources and capabilities drive its competitive advantage. For small PFAs, limited access to



resources like capital, technology, and skilled personnel constrains their ability to manage risks effectively (Barney, 1991; Aderibigbe, 2021). Economies of scale also play a critical role, as larger funds benefit from reduced costs and better diversification, while smaller funds often achieve suboptimal risk-return profiles (Badara, 2016; Shaheen & Malik, 2012).

3.0 METHODOLOGY

This study adopts an ex post facto research design using longitudinal data collection methods. The analysis covers an 11-year period (2012–2022), aligning with the mandatory adoption of International Financial Reporting Standards (IFRS) in Nigeria. This design allows for the examination of both cross-

sectional and temporal effects on the relationship between financial risk and the performance of Pension Fund Administrators (PFAs), while considering the impact of their Asset Under Management (AUM).

The population for this study comprises the 19 licensed PFAs operating in Nigeria, as listed on the official website of the National Pension Commission (PENCOM) as of December 31, 2023. These entities are regulated by PENCOM and manage pension funds under the Contributory Pension Scheme (CPS). The study focuses on these PFAs to ensure a comprehensive analysis of the relationship between financial risk management, fund size, and performance within the Nigerian pension industry.

Table 1: Categorisation of PFAs based on Asset Under Management (AUM)

AUM RANGE (₦)	CATEGORY	PFAs
Above 1 trillion	Tier 1: Large	Stanbic IBTC Pension Managers Access/ARM Pension Managers
Between 300 billion and 1 trillion	Tier 2: Medium	Premium Pensions Ltd FCMB Pension Managers Crusader Sterling Pensions Limited Pal Pension Trustfund Pensions Limited Leadway Pensure PFA Limited NLPC Pension Fund Administrators Limited NPF Pension Managers Limited
Below ₦300 billion	Tier 3: Small PFAs	Fidelity Pension Managers AIICO Pension First Guarantee Pension OAK Pensions Limited Tangerine APT Pensions Limited Norrenberger Pensions Limited Cardinal Stone Pensions Limited Citizens Pensions Limited Nigerian University Pension Management Company (NUPEMCO)

Source: PenCom Annual Reports, 2023

A purposive sampling technique was employed to select all small (Tier 3) PFAs with complete and publicly available IFRS-compliant financial reports for the study period (2012–2022). This method ensures the inclusion of only those entities with reliable and standardized data, which is essential for

conducting a comprehensive and accurate analysis.

Data were collected from secondary sources, specifically the IFRS annual financial reports of the sampled PFAs. These reports were retrieved from the official website of the National Pension Commission



(PENCOM) as of December 31, 2023. To ensure consistency and accuracy, all data were sourced exclusively from these publicly available audited reports. Key variables and their respective

measurements are outlined in the table below, providing a structured framework for analysing the relationship between financial risk management, fund size, and performance are outlined in Table below:

Table 2: Data Variable Measurement and Expected Sign

S/N	Variables	Code	Measurement	Sign
1	Financial	ROA	ROA= net profit divided by total assets	(%)
	Performance	ROE	ROE: = ratio of net profit after tax to total equity (%), IM. Pandi, (2008).	
2	Credit risk	CRR	Credit risk is measured as pension fund receivable divided by total assets (%), Ahmad Saeed (2014).	+/-
3	Market risk	MRR	Market risk is measured as pension company market interest expenses divided by total assets (%), Wood and McConney (2016).	+/-
4	Liquidity risk	LIR	Liquidity risk is measured as pension company Cash dividend by total assets (%), Razek (2014).	+/-
5	Operational risk	OPR	Operational risk is measured as operating expenses divided by total assets (%), Ogunleye, Soyemi, and Ashogbon (2014).	+/-
6	Foreign Exchange Risk	FER	Foreign exchange risk measured as change in exchange rate gain and loss divided by total asset (%), Olufemi, (2011).	+/-
7	Capital Adequacy Risk	CAR	Capital Adequacy Risk is measured as total equity divided by Total asset (%), IM. Pandi, (2008).	+/-
8	Fund Size	FUS	Fund size is measured as the natural logarithm of total assets, Shaheen and Malik (2012).	+/-

Source: Author (2024)

To ensure reliability, data were sourced exclusively from audited financial reports submitted to the National Pension Commission (PENCOM) in compliance with the Pension Reform Act of 2014 (amended). For validity, the following steps were taken: Normality Tests was Conducted using the Jarque-Bera statistic to assess the distribution of the data. And Outlier Analyses was Performed to identify and address any extreme values that could skew the results.

The study utilized pooled Ordinary Least Squares (OLS) regression analysis to examine the relationships between financial risk factors, fund size, and PFA performance. Additional diagnostic tests carried out included: T-tests to determine the individual statistical significance of the variables, F-tests to assess the overall significance of the regression models, R² to evaluate the goodness of fit of the

models, Variance Inflation Factor (VIF) to detect multicollinearity among the independent variables and Breusch-Pagan-Godfrey Test: To evaluate heteroscedasticity in the data. All analyses were performed at a 5% level of significance using STATA 13 software.

3.1 Model Specifications

Based on the theoretical review and empirical literature, the study formulated four models to analyse the IVs (Financial Risks), DVs (Return on Assets (ROA) and Return on Equity (ROE)), both with and without the moderating effects of fund size (FUS). The models are expressed in equation form as follows:

Model 1: (ROA without FUS):
$$ROA = \beta_0 + \beta_1(FR) + \beta_2(FS) + \beta_3(\text{moderatingVariables}) + \epsilon$$
$$ROA = \beta_0 + \beta_1(FRM) + \beta_2(FS) + \beta_3(\text{ControlVariables}) + \epsilon$$

Model 2: (ROA with FUS):

$$ROA = \beta_0 + \beta_1(FRM) + \beta_2(FS) + \beta_3(FR \times FS) + \beta_4(\text{moderating Variables}) + \epsilon$$

$$ROA = \beta_0 + \beta_1(FRM) + \beta_2(FS) + \beta_3(FRM \times FS) + \beta_4(\text{moderating Variables}) + \epsilon$$

Model 3: (ROE without FUS):

$$ROE = \beta_0 + \beta_1(FR) + \beta_2(FS) + \beta_3(\text{moderating Variables}) + \epsilon$$

$$ROE = \beta_0 + \beta_1(FRM) + \beta_2(FS) + \beta_3(\text{Control Variables}) + \epsilon$$

Model 4: (ROE with FUS):

$$ROE = \beta_0 + \beta_1(FRM) + \beta_2(FS) + \beta_3(FRM \times FS) + \beta_4(\text{moderating Variables}) + \epsilon$$

$$ROE = \beta_0 + \beta_1(FRM) + \beta_2(FS) + \beta_3(FRM \times FS) + \beta_4(\text{moderating Variables}) + \epsilon$$

Where: **ROA** is Return on Assets (DVs), **ROE** is Return on Equity (dependent variable), **FR** is

Financial Risks (IDVs), **FS** is Fund Size (independent variable), **FR × FS** is the interaction term to capture the moderating effect of fund size, **moderating Variables** is the fund size influencing performance, β_0 is intercept, $\beta_1, \beta_2, \beta_3, \beta_4$ are Coefficients of the independent and moderating variables, while ϵ is Error term.

Pooled OLS regression was chosen due to its suitability for analysing ratio-based dependent variables and datasets lacking panel data structures. By pooling data across firms and time periods, this approach enhances sample size, mitigates issues related to degrees of freedom, and allows for robustness checks, thereby improving the reliability and generalizability of findings.

4.0 RESULT AND DISCUSSION

4.1 Descriptive Statistics

Table 4.1: Descriptive Statistics

Variable	Mean	Median (p50)	Max	Min	Std. Dev (sd)	N
ROA	5.8	8.3	32	-67	17	70
ROE	5.8	8.8	43	-131	27	70
CRR	9.7	6.5	38	0	8.7	70
MRR	0.041	0	0.64	0	0.13	70
LIR	34	27	93	0.019	27	70
OPR	37	35	95	4.6	19	70
FER	3,988	2,676	19,453	87	4,347	70
CAR	0.84	0.86	0.98	0.36	0.1	70
FUS	8.9	8.9	9.6	7.8	0.5	70

Source: STATA 13.

From the table 4.1 above, the analysis reveals that Small PFAs exhibit weaker profitability, with mean ROA and ROE at 5.8% and high variability of 17% and 27% standard deviations, respectively. They face higher credit risk (9.7%) and liquidity risk (34%), reflecting challenges in managing receivables and cash flow. Operational risk is substantial at 37%, while foreign exchange risk is low (3,988), likely due to limited international operations. Capital adequacy is

slightly better (0.84%) than larger PFAs, and their mean fund size (8.9) confirms their smaller scale with low variation (0.5 standard deviation). Overall, small PFAs struggle with profitability and liquidity but maintain lower foreign exchange risk and slightly better capital coverage.

4.2 Correlation Analysis

Table 4.2: Correlation Analysis

Variable	ROA	ROE	CRR	MRR	LIR	OPR	FER	CAR	FUS
ROA	1.00								
ROE	0.96	1.00							
CRR	-0.11	-0.04	1.00						
MRR	0.10	0.11	0.37	1.00					
LIR	0.02	0.06	-0.34	-0.21	1.00				
OPR	-0.06	-0.13	0.28	0.25	-0.21	1.00			
FER	0.61	0.54	-0.05	0.16	-0.17	0.41	1.00		
CAR	0.22	0.35	0.07	-0.12	0.06	-0.25	-0.17	1.00	
FUS	0.65	0.57	-0.34	-0.02	0.07	-0.17	0.61	-0.19	1.00

Source: STATA 13.

A strong positive correlation as shown in table 4.2 exists between ROA and ROE ($r = 0.96$), indicating alignment between asset management and equity returns. Credit risk (CRR) exhibits weak negative correlations with both ROA ($r = -0.11$) and ROE ($r = -0.04$), suggesting minimal impact on profitability. Foreign exchange risk (FER) shows strong positive correlations with

both ROA ($r = 0.61$) and ROE ($r = 0.54$), indicating that small PFAs exposed to currency fluctuations tend to perform better financially. Fund size (FUS) demonstrates a strong positive correlation with both ROA ($r = 0.65$) and ROE ($r = 0.57$), underscoring the importance of growth strategies for improving financial performance.

4.3 Regression Results

Table 4.3.1: ROA Performance Regression Results without Moderation.

variables	CRR	MRR	LIR	OPR	FER	CAR	FUS	_cons	N	R-SQUARE
Result	0.11	12.00	0.04	-0.10	0.0018***	58**	15***	-184***	70.00	0.65

Source: STATA 13. ***1%, **5% and *10% Level of Significance

In table 4.3.1 above for small PFAs, credit risk (CRR) and market risk (MRR) have positive but insignificant effects, suggesting these risks are less critical for smaller funds. In contrast, foreign exchange risk (FER) has a significant positive effect (0.0018***), highlighting its importance for small PFAs. Capital adequacy risk (CAR) also shows a strong positive effect (58***), emphasizing the need for adequate capital buffers to enhance profitability. Additionally, fund size (FUS) significantly boosts ROA (15***), indicating that growth is a key strategy for small PFAs to improve financial performance. This suggests that

increasing their asset base is crucial for better returns. These findings align with existing literature. The positive impact of CAR on ROA supports El-Rabat et al. (2023), who emphasized the role of capital reserves in improving financial performance. Similarly, the significance of FUS aligns with Ogunode et al. (2022), who found that larger fund sizes enhance risk management and stability. Overall, small PFAs should prioritize capital adequacy and growth strategies to strengthen their financial performance.

Table 4.3.2: ROE Performance Regression Results without Moderation

variables	CRR	MRR	LIR	OPR	FER	CAR	FUS	_cons	N	R-Squared
Result	0.4	23	0.11	-0.06	0.003 ***	116** *	20**	-278***	70	0.67

Source: STATA 13. ***1%, **5% and *10% Level of Significance

From the result above, foreign exchange risk (FER) and capital adequacy risk (CAR) have strong positive impacts on ROE (0.003*** and 116***, respectively), highlighting their importance for small PFAs' profitability. Fund size (FUS) also significantly boosts ROE (20**), emphasizing that scaling up operations is crucial for improving equity returns. These findings suggest small PFAs should focus on

growth while maintaining strong risk management practices. The results align with existing literature: FER's impact supports Dae and Wamugo (2022) on effective currency management, while FUS's effect reinforces Ogunode et al. (2022), who linked larger fund sizes to better financial performance through improved risk management.

Table 4.3.3: ROA and ROE Regression with Fund Size as Moderation.

variable s	CRR #FUS	MRR# FUS	LIR#F US	OPR#F US	FER#FUS #FUS	CAR #FUS	_con s	N	R- Squared
Result (ROA)	0.002 4	1.2	0.0065	0.024**	0.000025* **	0.99	-9.1	134	0.18
Result (ROE)	0.007 4	1.3	0.0063	0.017*	0.000052* **	-3.7*	30	134	0.14

*Source: STATA 13. ***1%, **5%, 10% Level of Significance.

The table 4.3.3 above presents the results of regression analyses that examined the impact of various risk factors on Return on Assets (ROA) and Return on Equity (ROE), with fund size (FUS) acting as a moderating variable. The analysis is conducted at different levels of significance (1%, 5%, and 10%), and the results are interpreted below. It reveals that operational risk and foreign exchange risk have significant positive impacts on the performance of small PFAs, as measured by ROA and ROE, while credit, market, and liquidity risks show statistically insignificant effects. Capital adequacy risk negatively affects ROE but not ROA, indicating challenges for smaller PFAs in managing regulatory and capital requirements. Fund size significantly moderates the relationship for operational and foreign exchange risks but not for credit, market, liquidity, or capital adequacy risks.

These findings partially support the hypotheses: financial risks (H₁) have a significant impact on performance for some risks but not all, and fund size (H₂) significantly moderates the relationship for specific risks. The low R-squared values suggest other factors also influence performance, highlighting the complexity of small PFAs financial dynamics. Overall, the results emphasize the need for tailored risk management strategies to address the unique challenges faced by small PFAs in Nigeria.

4.4 Summary and Discussion of Findings

Small Pension Fund Administrators (PFAs) in Nigeria

face challenges such as weaker financial performance (mean ROA and ROE of 5.8%), higher liquidity risk (34%), and greater vulnerability to external shocks. Capital adequacy risk (CAR) and foreign exchange risk (FER) significantly enhance ROA and ROE, while fund size (FUS) positively moderates these relationships, emphasizing the importance of economies of scale. However, liquidity and operational risks remain critical barriers. Small PFAs should focus on expanding their asset base, improving liquidity management, and maintaining adequate capital buffers.

These findings suggest that small PFAs should focus on strategies to increase their asset base, improve liquidity management, and maintain adequate capital buffers. Policymakers can support these efforts by providing regulatory incentives for consolidation, technological adoption, and access to international markets. By addressing these challenges, small PFAs can enhance their financial stability and contribute more effectively to the Nigerian pension system.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The study highlights the critical role of financial risk management in shaping the performance of small PFAs, with fund size acting as a key moderating factor. Small PFAs must adopt strategic risk management approaches to ensure financial

sustainability. Policymakers should develop tailored regulatory frameworks to improve capital adequacy, operational efficiency, and risk management practices. Addressing these challenges will enhance the resilience and performance of small PFAs, contributing to the stability of Nigeria's pension system.

In conclusion, this study enhances the understanding of the interplay between financial risk and the performance of small PFAs while emphasizing the moderating role of fund size. The insights gained provide valuable guidance for strengthening the stability and performance of small PFAs in Nigeria, ensuring the continued growth and security of pension funds for the benefit of retirees.

5.2 Recommendations

Based on the above findings of this study, the following recommendations are made to enhance the financial performance and risk management capabilities of small PFAs in Nigeria:

Strengthen Capital and Liquidity Management: Maintain adequate capital reserves and improve cash management practices.

Leverage Economies of Scale: Encourage mergers and expand asset bases through diversification and marketing.

Enhance Risk Management: Invest in advanced tools and develop tailored frameworks for risk mitigation.
Manage Foreign Exchange Risk: Use hedging instruments and diversify investments across currencies.

Regulatory Support: Simplify guidelines, provide capacity-building programs, and offer incentives for capital accumulation.

Adopt Technology: Embrace digital transformation and data-driven decision-making tools.

Promote Research and Collaboration: Conduct further studies and foster public-private partnerships to address challenges.

By implementing these strategies, small PFAs can improve their financial stability and contribute to the sustainability of Nigeria's pension system. Policymakers, regulators, and stakeholders must collaborate to create an enabling environment that supports the growth and resilience of small PFAs, safeguarding the retirement savings of millions of Nigerians.

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