



**NAMIBIA
UNIVERSITY
OF SCIENCE AND
TECHNOLOGY**

HP-GSB
HAROLD PUPKEWITZ
Graduate School of Business

**ASSESSING THE INFLUENCE OF LEASE FINANCING ON FINANCIAL
PERFORMANCE OF SELECTED PUBLIC SECTOR ENTREPRISES IN NAMIBIA**

FRANCHIA MENJONO

215002180

**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE MASTER'S DEGREE IN BUSINESS ADMINISTRATION, FACULTY OF
COMMERCE, HUMAN SCIENCES AND EDUCATION OF NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

SUPERVISOR: PROF. ISAAC RANDA

AUGUST 2025

ABSTRACT

This mixed-methods study examined the influence of lease financing on the financial performance of 11 commercial public service enterprises (PSEs) in Namibia over 10 years (2013–2022). The research aimed to assess the extent of lease financing adoption, identify factors influencing its use, and examine its effect on financial performance, measured by return on assets (ROA). Objectives included analysing the roles of gearing, liquidity, taxation, and firm size, with firm size as a moderating factor. The methodology combined quantitative analysis of published financial data with qualitative insights from a stakeholder survey conducted via online questionnaires using Google Forms. Findings indicate that lease financing is prevalent among Namibian PSEs, particularly in capital-intensive sectors, due to its liquidity and cash flow benefits. However, it is associated with a slight negative influence on ROA, suggesting that long-term costs may offset short-term advantages. Larger firms manage lease obligations more effectively, reducing negative effects. Taxation and liquidity constraints significantly drive lease financing decisions, with tax benefits acting as a key incentive. Gearing levels also influence adoption, highlighting the need for balanced debt management. The study concludes that lease financing is a valuable tool for PSEs but requires strategic management to ensure long-term financial sustainability. Key recommendations include policy reforms to increase leasing awareness, regulatory support for transparent lease agreements, and financial literacy programs for PSE managers to optimise leasing strategies. This research contributes to understanding alternative financing mechanisms in developing economies and offers practical insights for policymakers and financial managers in Namibia.

Keywords: Lease financing, financial performance, Public Sector Enterprises (PSEs), Namibia, Gearing, Liquidity, Taxation, Firm size, Return on assets, IFRS 16.

DECLARATION

I, **Franchia Menjono**, solemnly declare that this thesis represents my original intellectual contribution. All sources referenced in this work have been appropriately cited, and the thesis has neither been submitted nor presented in pursuit of any other degree or qualification at any academic institution.

Student Number: **215002180**

Student signature:



Date: 05 August 2025

Supervisors' approval on authenticity and conformity to NUST regulation and guidelines

Supervisors Name: Prof Isaac Randa

Signature

Date

RETENTION AND USE

I, **Franchia Menjono**, being a candidate for the degree of Master of Business Administration, accept the requirements of the Namibia University of Science and Technology relating to the retention and use of master's theses/mini theses deposited in the library.

In terms of these conditions, I agree that the original of my thesis deposited in the library will be accessible for purposes of study and research, following the normal conditions established by the Librarian for the care, loan or reproduction of theses/mini theses.

Signature:

A handwritten signature in black ink, appearing to read 'Franchia Menjono', written in a cursive style.

Date: 05 August 2025

ACKNOWLEDGEMENT

I extend my deepest gratitude to all the individuals and organisations who played a pivotal role in supporting this research endeavour. Foremost, I am profoundly indebted to my supervisor, Prof. Isaac Randa, whose expertise, guidance, and unwavering support were instrumental throughout this journey. His insightful feedback, constructive critiques, and steadfast encouragement were indispensable to the successful completion of this thesis. I, furthermore, would like to thank Prof Samuel Mensah for his constant reminder that he does not want to add my name to the list of his brilliant students who never finished their studies.

I also wish to express my heartfelt appreciation to the Public Sector Enterprises for their invaluable cooperation in providing access to the financial data essential for this study. The contributions of their management teams and stakeholders, who shared their expertise and perspectives, significantly enriched the findings of this research.

A special acknowledgement is reserved for my beautiful wife Mbahimua, my lovely children Virii, Vaanda, Vetjevera and Rusuvero, whose unwavering belief in my abilities and constant encouragement have been a source of immense strength. Lastly, I extend my thanks to the Namibia University of Science and Technology (NUST) for providing a conducive academic environment that facilitated this research.

TABLE OF CONTENTS

Abstract	i
Declaration	ii
Retention and Use	iii
Acknowledgement.....	iv
List of Tables.....	xi
List of Figures	xii
Chapter 1: INTRODUCTION AND BACKGROUND.....	1
1.1 Introduction.....	1
1.2 Overview of the Study Background and Context	2
1.3 Problem Statement	4
1.4 Aim and Research Objectives	5
1.4.1 Research Aim.....	5
1.4.2 Main Research Objective	5
1.4.3 Specific Research Objectives.....	6
1.5 Research Questions	6
1.5.1 Main Research Question	6
1.5.2 Sub-Questions	6
1.6 Study Hypotheses.....	6
1.6.1 Main Effects Hypotheses	7
1.6.2 Interaction (Moderation) Effects Hypotheses	7
1.7 Overview of Research Strategy and Interpretive Framework.....	8
1.8 Relevance and Significance of the Study.....	9
1.8.1 Business Managers and Practitioners.....	9
1.8.2 Research and the Academic Community	9
1.9 Assumptions, Limitations, and Delimitations.....	10
1.9.1 Assumptions.....	10

1.9.2 Limitations	11
1.9.3 Delimitations/Scope	12
1.10 Definitions of Key Terms	12
1.11 Study Outline	14
Chapter 2: Literature Review and Theoretical Analysis	16
2.1 Introduction.....	16
2.2 Theoretical Literature.....	16
2.3 Theoretical Framework.....	19
2.3.1 Pecking Order Theory.....	21
2.3.2 Agency Theory.....	22
2.3.3 Trade-Off Theory	23
2.4 Research Themes and Empirical Evidence.....	24
2.4.1 Extent of Lease Financing Dependence and Financial Performance.....	24
2.4.2 Variables Affecting Lease Financing Adoption	25
2.4.3 Policy Implications for Lease Financing Strategies.....	26
2.5 Study Variables.....	27
2.5.1 Dependent Variable	27
2.5.2 Independent Variables	28
2.5.3 Moderating Variable	30
2.6 The Study Conceptual Framework	33
2.7 Synthesis of Literature	34
2.8 Conclusion	35
Chapter 3: Research Methodology and Design.....	37
3.1 Introduction.....	37
3.2 Overview of the Problem and Purpose	37
3.3 Research Philosophy	38
3.3.1 Epistemological Stance.....	38

3.3.2 Ontological and Axiological Assumptions	39
3.4 Research Approach	39
3.5 Research Design and Strategy	40
Study Location	41
3.6 Study Population	41
3.7 Sampling Strategies and Sample Size	42
3.8 Data Collection Methods.....	42
3.8.1 Secondary Data Collection.....	42
3.8.2 Primary Data Collection.....	43
3.9 Measurements and Instruments	43
3.9.1 Analytical Framework.....	43
3.10 Data Quality Control.....	44
3.10.1 Quantitative Data	44
3.10.2 Qualitative Data	45
3.11 Data Analysis	47
3.12 Ethical Consideration.....	47
3.12.1 Informed Consent.....	48
3.12.2 Confidentiality and Anonymity	48
3.12.3 Right to Withdraw.....	49
3.12.4 Protection from Harm	49
3.12.5 Restricted Data Use.....	49
3.12.6 Objectivity and Impartiality	50
3.12.7 Compliance with NUST Guidelines	50
3.13 Conclusion	51
Chapter 4: Data Presentations and Analysis	52
4.1 Introduction.....	52
4.2 Quantitative Data Analysis	52

4.3 Methodology	53
4.3.1 Data	53
4.3.2 Analysis.....	55
4.4 Results and Analysis	56
4.4.1 Descriptive Statistics and Variances	56
4.4.2 Correlation Analysis	58
4.4.3 Regression Analysis Results	61
4.4.4 ANOVA Analysis Results	64
4.4.5 Model Selection	69
4.5 Revised Diagnostic Test Results for Non-Moderated Regression Model (With Benchmark Comparisons).....	73
4.5.1 Heteroskedasticity Tests:	73
4.5.2 Normality of Residuals:	74
4.5.3 Model Specification Error:	74
4.5.4 Panel Unit Root Tests (Levin-Lin-Chu - LLC):	74
4.5.5 Moderated Model:	75
4.6 Revised Diagnostic Test Results for Moderated Regression Model (With Benchmark Comparisons).....	76
4.6.1 Heteroskedasticity	76
4.6.2 Normality of Residuals	77
4.6.3 Model Specification	77
4.6.4 Stationarity	77
4.6.5 Overall Diagnostic Conclusion	78
4.6.6 Model Visualizations	78
4.7 Qualitative Data Analysis	84
4.7.1 Methodology	85
4.7.2 ATLAS.ti Analysis Process	85
4.7.3 Thematic Findings	87

4.7.4 Discussion of Qualitative Findings.....	94
4.8 Hypotheses Testing and Interpretation	96
4.8.1 H ₁ : Lease financing has a significant positive influence on PSE financial performance.	96
4.8.2 H ₂ : Gearing has a significant negative influence on PSE's financial performance.	97
4.8.3 H ₃ : Liquidity has a significant positive influence on PSE's financial performance.	97
4.8.4 H ₄ : Taxation has a significant influence on PSE's financial performance.	98
4.8.5 H ₅ : Firm size significantly moderates the relationship between lease financing and financial performance.	98
4.8.6 H ₆ : Firm size significantly moderates the relationship between gearing and financial performance.....	98
4.8.7 H ₇ : Firm size significantly moderates the relationship between liquidity and financial performance.....	99
4.8.8 H ₈ : Firm size significantly moderates the relationship between taxation and financial performance.....	99
4.9 Summary of Findings.....	100
4.9.1 Quantitative Analysis - Summary of Findings.....	100
4.9.2 Qualitative Analysis - Summary of Findings.....	100
4.10 Conclusion	102
Chapter 5: Discussions, Conclusions and Recommendations.....	103
5.1.1 Main Research Question	103
5.1.2 Sub-Questions	103
5.2 Summary of Main Findings, Discussions, and Conclusions	104
5.2.1 Lease Financing Influence on Financial Performance.....	104
5.2.2 Extent of Lease Financing Usage	105
5.2.3 Factors Influencing Lease Financing Adoption.....	105

5.2.4 Firm Size as a Moderator	106
5.3 Discussion	106
5.4 Implications for Practice and Further Research	107
5.4.1 Implications for Practice	107
5.4.2 Implications for Further Research	108
5.5 Recommendations	108
5.6 Conclusion	109
APPENDICES	127
Appendix A: Research Permission	127
Appendix B: Online Questionnaire	128
Appendix C: Request for Permission to Conduct Research at PSEs	129
Appendix D: Permission by PSEs to Conduct Research	130

LIST OF TABLES

Table 1: Descriptive Statistics and Variance Analysis (Non-Moderated Model).....	56
Table 2: Descriptive Statistics and Variance Analysis (Moderated Model).....	58
Table 3: Correlation Matrix (Non-Moderated Model).....	59
Table 4: Correlation Matrix (Moderated Model).....	60
Table 5: Regression Results (Non-Moderated Model)	62
Table 6: Regression Results (Moderated Model)	63
Table 7: ANOVA for Pooled OLS Model (Non-Moderated).....	65
Table 8: ANOVA for the Fixed Effects Model (Non-Moderated)	66
Table 9: ANOVA for the Random Effects Model (Non-Moderated).....	67
Table 10: ANOVA for Pooled OLS Model (Moderated)	67
Table 11: ANOVA for the Fixed Effects Model (Moderated)	68
Table 12: ANOVA for the Random Effects Model (Moderated).....	69
Table 13: Model Selection Tests (Non-Moderated Model).....	70
Table 14: Model Selection Tests (Moderated Model).....	71
Table 15: VIF (Non-Moderated Model).....	72
Table 16: Diagnostic Tests (Non-Moderated Model).....	73
Table 17: VIF (Moderated Model).....	75
Table 18: Diagnostic Tests (Moderated Model).....	76
Table 19: Code-Document Table for Theme Frequency	87
Table 20: Code Co-Occurrence Table for Key Themes	88

LIST OF FIGURES

Figure 1: Theoretical Framework	33
Figure 2. Average ROA Trends for the Non-Moderated Model (2013–2022).....	79
Figure 3. ROA Trends by Firm Size for Moderated Model (2013–2022).....	79
Figure 4. Residual Histogram for Non-Moderated Model.....	80
Figure 5. Residual Histogram for Moderated Model.....	81
Figure 6. Q-Q Plot for Non-Moderated Model Residuals	82
Figure 7. Q-Q Plot for Moderated Model Residuals.....	82
Figure 8. Residual vs. Fitted Plot for Non-Moderated Model	83
Figure 9. Residual vs. Fitted Plot for Moderated Model	84

LIST OF ACRONYMS AND ABBREVIATIONS

AIC	Akaike Information Criterion
ATLAS.ti	Archiv für Technik, Lebenswelt und Alltags-Sprache Text Interpretation (Analysis Tool for Qualitative Data)
ANOVA	Analysis of Variance
BIC	Bayesian Information Criterion
COVID-19	Corona Virus Disease 2019
CSV	Comma-Separated Values
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
ESD	Explanatory Sequential Design
FE	Fixed Effects
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
LM	Lagrange Multiplier
MMR	Mixed-Methods Research
MS	Mean Square
NAD	Namibian Dollar
NUST	Namibia University of Science and Technology
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares
PSEs	Public Sector Enterprises
RE	Random Effects

ROA	Return on Assets
ROE	Return on Equity
STATA	Statistics and Data (software)
SS	Sum of Squares
VIF	Variance Inflation Factor

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 Introduction

Drawing on the Modigliani-Miller (MM) 1958 theory as a foundational framework to understand capital structure decisions, the study explores the intricate dynamics of lease financing within Namibian public sector enterprises (PSEs). The study assesses how lease financing mechanism influences financial performance, measured as return on assets (ROA), amidst global trends towards innovative financing strategies. In a world where public sector entities increasingly sought sustainable financial solutions to balance operational efficiency and financial constraints, Namibian PSEs face several challenges. These include limited access to capital markets and poor financial performance, which results in reliance on government bailouts (Limbo, 2019; Marenga, 2020). Guided by a pragmatist philosophy, the study addresses critical questions about the efficacy of lease financing, its determinants, and its implications for policy and practice, contributing to global discussions on public sector financial management.

This chapter outlines the research context, problem statement, aim, objectives, questions, and hypotheses, emphasising the firm size's moderating role. It introduces the research strategy, theoretical framework, and the study's significance for enhancing PSE financing strategies in Namibia and beyond. Assumptions, limitations, and delimitations are discussed, key terms are defined, and a study outline concludes the chapter, providing a roadmap for the reader.

1.2 Overview of the Study Background and Context

In Namibia, PSEs face significant financial constraints, limiting their ability to raise capital through budgetary allocations, internal revenue, loans, or bond issuance (Marimuthu, 2021). Lease financing offers an alternative, enabling PSEs to optimise their debt-equity balance while maintaining liquidity (Cosci et al., 2015). PSEs are essential instruments for governments globally to achieve developmental objectives and implement public policies in targeted sectors (Limbo, 2019; Marenga, 2020; Marimuthu, 2021). In Namibia, commercial PSEs are expected to contribute to economic growth and service delivery while operating with sustainable profitability, like the private sector companies (Ministry of Finance and Public Enterprises, 2023). However, many PSEs in Namibia struggle to meet these strategic objectives, often underperforming and continually relying on government subsidies rather than generating shareholder value (Marimuthu, 2021). As of 2024, two out of the 23 commercial PSEs in Namibia are under liquidation or judicial management, and 11 others have received N\$4.5 billion in government subsidies over the five years between 2016 and 2021, highlighting that they were financially constrained and dependent on government funding (Minney, 2019). This reliance on subsidies limits the government's ability to allocate funds to other critical areas of development (Limbo, 2019). Given these challenges, lease financing can be a potential solution for PSEs to access essential assets without the burden of heavy upfront capital and maintenance costs (Bello et al., 2016; Michiels et al., 2021) and hence improve efficiencies due to reduced obsolete assets, providing a means for PSEs to potentially improve financial performance (Kibunja & Fatoki, 2020). This study, therefore, seeks to assess the influence of lease financing on the financial performance of PSEs

Corporate financial performance, an aspect of corporate financial sustainability, is critical for shareholder wealth maximisation and financial health, achieved when a company's return on capital exceeds its cost of capital (Minhat & Dzolkarnaini, 2016). In the literature on organisational financial sustainability, the financial health perspective is most directly aligned with the concept of organisational financial performance (Kuttu, 2024). This perspective emphasises the use of key financial indicators such as revenue diversification, cost-efficiency, profitability, liquidity, solvency, and long-term financial viability as foundational to sustainability. This perspective on financial sustainability views strong financial performance not merely as an end, but as a necessary condition for organisational continuity, adaptability, and strategic autonomy (Akingbola & Domanski, 2022; Kakati & Roy, 2021). Scholars adopting this lens often draw on financial management theory and the resource-based view (RBV), arguing that internal financial resources and capabilities are critical in enabling organisations to invest in innovation, navigate funding uncertainties, and withstand external shocks (Gugong, 2023). Besides, improved financial performance enhances organisational credibility with donors, investors, and stakeholders alike, thereby reinforcing broader organisational legitimacy and long-term sustainability (Young et al., 2021). Thus, while financial performance is not the only determinant of sustainability, it serves as a core operational indicator through which the resilience and strategic capacity of the organisation are made visible and measurable. Often, scholars draw on financial decision-making frameworks embedded in corporate finance, such as capital structure theories, investment appraisal models, and working capital management principles, to assess and document the financial health dimension of organisational financial sustainability (Gugong, 2023; Young et al., 2021). Therefore, by adopting the financial health perspective of organisation financial sustainability, this study explored the concept of organisation financial performance by linking it to lease financing.

In leasing contracts, legal ownership of assets is separated from their use, allowing lessees to benefit from assets while lessors retain ownership (Paik et al., 2020). Unlike traditional debt, leasing avoids large upfront payments, improving cash flow and liquidity for financially constrained PSEs (Minhat & Dzolkarnaini, 2016; Omete & Kajirwa, 2016). This aligns with contemporary financial theory emphasising minimising capital costs and optimising capital structure to enhance financial performance and shareholder value (Sindani-Wafula et al., 2016; Hermanto et al., 2021). Empirical evidence suggests that lease financing improves financial flexibility and operational efficiency (Wong & Joshi, 2015). The adoption of International Financial Reporting Standards (IFRS) 16 has increased the need for transparency by requiring lease obligations to be reported on financial statements, thereby influencing the Statement of Financial Position and financial performance (Sbaih et al., 2023).

This study examined the influence of lease financing on the financial performance of selected Namibian PSEs, assessing its extent as an alternative financing source and the factors affecting its adoption. It aims to determine whether lease financing can reduce over-reliance on government subsidies and support PSEs' long-term financial objectives.

1.3 Problem Statement

According to the pecking order theory, firms prioritise internal funds, followed by debt and leasing, before resorting to external equity due to asymmetric information and agency costs (Grace et al., 2020; Guizani, 2020). Leasing encourages efficient resource use, helping managers to avoid wastage and meet financial obligations to optimise performance (Minhat & Dzolkarnaini, 2016). Leasing theory suggests that financially distressed firms prefer leasing over conventional debt to support operations (Eisfeldt & Rampini, 2009; Li & Yu, 2023).

Despite this, Namibian PSEs face financial constraints, relying heavily on external equity and government subsidies, which hinder shareholder wealth maximisation and lead to poor financial performance (Zaher, 2010). From 2015 to 2020, a few PSEs provided dividends to the government (Marenga, 2020). For example, recently, the Namibia Institute of Pathology's (NIP) use of leasing over direct asset purchases has raised questions about its influence on financial performance (Smith, 2024). Similarly, Trans Namib's N\$2.6 billion government-guaranteed loan to acquire locomotives highlights unsustainable reliance on government subsidies (Ministry of Finance and Public Enterprises, 2023). Thus, it is argued that effective use of lease financing can significantly enhance the financial performance of Namibian PSEs by providing a viable alternative to equity financing and reducing reliance on government subsidies.

This study investigated the extent of lease financing usage, factors influencing its adoption, and its influence on the financial performance of selected Namibian PSEs to assess its potential in reducing dependency on government support.

1.4 Aim and Research Objectives

1.4.1 Research Aim

The study aimed to evaluate the role of lease financing in enhancing the financial performance of selected Namibian PSEs. It assesses the extent of lease financing usage, identifies factors influencing its adoption, and evaluates its influence on financial outcomes to determine if it can reduce reliance on government subsidies and therefore support long-term financial sustainability.

1.4.2 Main Research Objective

To assess the influence of lease financing on the financial performance of selected Namibian PSEs.

1.4.3 Specific Research Objectives

- i. To examine the extent to which selected Namibian PSEs utilise lease financing as a capital-raising mechanism.
- ii. To analyse how gearing, liquidity, taxation, and firm size (moderating factor) affect the adoption of lease financing as an alternative or complement to conventional debt financing in selected Namibian PSEs.
- iii. To propose a policy on financing strategies for Namibian PSEs to promote lease financing and enhance financial performance.

1.5 Research Questions

1.5.1 Main Research Question

What is the influence of lease financing on the financial performance of selected Namibian PSEs?

1.5.2 Sub-Questions

- i. To what extent do selected PSEs utilise lease financing?
- ii. How do gearing, leasing, liquidity, taxation, and firm size (as a moderating factor) influence the financial performance of selected PSEs in the context of lease financing?
- iii. What strategic interventions can be implemented to develop a leasing policy for selected Namibian PSEs based on the relationship between the lease financing axis and financial performance?

1.6 Study Hypotheses

The following hypotheses, using directional and non-directional approaches, were tested (Field, 2018; Punch, 2014):

1.6.1 Main Effects Hypotheses

H₁: Lease financing has a significant positive influence on the financial performance of Namibian PSEs.

H₂: Gearing has a significant negative influence on the financial performance of Namibian PSEs.

H₃: Liquidity has a significant positive influence on the financial performance of Namibian PSEs.

H₄: Taxation has a significant influence on the financial performance of Namibian PSEs.

1.6.2 Interaction (Moderation) Effects Hypotheses

H₅: Firm size significantly moderates the relationship between lease financing and the financial performance of Namibian PSEs, altering the strength or direction of the influence.

H₆: Firm size significantly moderates the relationship between gearing and the financial performance of Namibian PSEs, altering the strength or direction of the influence.

H₇: Firm size significantly moderates the relationship between liquidity and the financial performance of Namibian PSEs, influencing the strength of the relationship.

H₈: Firm size significantly moderates the relationship between taxation and the financial performance of Namibian PSEs, influencing the strength of the relationship.

1.7 Overview of Research Strategy and Interpretive Framework

This study employed a mixed-methods research approach, combining quantitative and qualitative methods to examine lease financing on the financial performance of selected Namibian PSEs. The quantitative component analyses financial data, using return on assets (ROA) to assess the relationship between lease financing and financial performance, aligning with the positivist paradigm (Creswell & Creswell, 2023). The qualitative component involves an online survey of managers, financial officers, and policymakers to explore their decision-making processes and contextual factors, rooted in the interpretivist paradigm (Saunders et al., 2021). This dual approach ensures a holistic understanding of the “what”, “how”, and “why” behind lease financing practices.

The study, therefore, adopts a pragmatic research theoretical perspective, integrating multiple methods to address complex research questions (Toyon, 2021). Pragmatism balances empirical evidence with contextual and subjective factors, aligning with the study’s aim to provide actionable insights for Namibian PSEs. The interpretive framework incorporates a constructivist approach, recognising that knowledge is socially constructed through stakeholder interactions and experiences (Creswell & Creswell, 2023). This is relevant for understanding the perceptions of lease financing. Additionally, a critical realist perspective also supports this choice, for example it provides a philosophical and methodological foundation that recognises the complexity of social reality, seeks to explain causality rather than merely describe correlations, values depth, context, and structure in research, and encourages theoretical insight and practical application through understanding study mechanisms (Fletcher, 2017). It acknowledges an objective reality as mediated by social and contextual factors, such as government policies and economic conditions, which shape lease financing’s influence (Bhaskar, 2016).

1.8 Relevance and Significance of the Study

1.8.1 Business Managers and Practitioners

This study provides practical insights for Namibian Public Sector Enterprise (PSE) managers by demonstrating how lease financing could reduce reliance on government subsidies, addressing challenges of limited capital access and poor revenue generation (Limbo, 2019; Marenga, 2020). By examining factors like gearing, liquidity, taxation, and firm size, it offered evidence on optimising financing strategies to enhance fiscal responsibility (Minhat & Dzolkarnaini, 2016; Osman, 2020). Unlike prior research focused on private enterprises (Asenso, 2021; Wong & Joshi, 2015), this study illuminated leasing's role in the public sector, guiding financial managers and policymakers in navigating regulatory constraints to improve liquidity and operational efficiency.

1.8.2 Research and the Academic Community

This study advanced the academic understanding of lease financing by addressing a gap in research on Namibia's public enterprises, building on foundational capital structure theories (Modigliani & Miller, 1958; Omete & Kajirwa, 2016). It contributed empirical evidence on contextual factors influencing financing decisions in Namibian PSEs, thereby enriching the literature on public sector financial management (Minhat & Dzolkarnaini, 2016; Shah & Jam-e-Kausar, 2012). The mixed-methods approach provided a robust framework for future studies, supporting financial management training and cross-border knowledge exchange on sustainable financing strategies (Creswell & Creswell, 2023; Gujarati & Porter, 2022; Limbo, 2019)

1.9 Assumptions, Limitations, and Delimitations

1.9.1 Assumptions

This study is underpinned by several key assumptions that shape its design and scope. It considers that lease financing is a critical financial tool for Namibian PSEs to acquire assets and manage cash flow, offering flexibility and potential tax benefits as an alternative to traditional debt financing (Smith & Watts, 2020). This premise is based on the potential of leasing to address financial constraints unique to Namibian PSEs, such as limited access to capital markets and high borrowing costs, which make lease financing an attractive option for supporting economic development (Amadhila & Iyambo, 2022; Marenga, 2020). The study also assumes that financial performance can be effectively assessed using widely accepted indicators such as return on assets (ROA), return on equity (ROE), and net profit margin (NPM), which are recognised in financial literature as reliable measures of organisational efficiency and profitability (Brigham & Houston, 2022).

Furthermore, it is assumed that the perspectives of stakeholders, including managers, financial officers, and policymakers, provide valuable insights into the decision-making processes and contextual factors influencing lease financing. This assumption, rooted in the interpretivist paradigm, emphasises the importance of subjective experiences and social contexts, which is particularly relevant to the qualitative component of the study that seeks to understand the “why” behind lease financing decisions (Saunders et al., 2021). The study assumes that adhering to ethical research practices, such as obtaining informed consent and ensuring confidentiality, enhances the credibility and reliability of the findings, aligning with principles that prioritise participants’ rights and dignity (Bryman & Bell, 2019). This underpins the integrity of the research process. Finally, the study assumed that a mixed-methods approach, combining quantitative and qualitative methods, provides a more comprehensive understanding of the influence of lease financing on financial

performance than either method alone, allowing for a balanced exploration of empirical and contextual factors.

1.9.2 Limitations

The study encountered some limitations that potentially could affect its internal validity and generalisability. The reliance on secondary financial data from financial statements and annual reports could fail to capture qualitative factors, such as managerial perspectives or external economic influences, which could limit the depth of insights into lease financing decisions. To mitigate this, the study adopted a mixed-methods research approach, incorporating qualitative data from an online survey of stakeholders to provide a more comprehensive understanding of contextual factors. Additionally, variations in accounting practices, particularly following IFRS-16 implementation, introduced inconsistencies in lease obligation reporting, which could have skewed the assessment. This was addressed by prioritising audited financial statements and cross-validating data to ensure accuracy and internal consistency.

The study focused on a select group of commercial PSEs restricted its generalisability, as these entities did not fully represent the diverse characteristics of all Namibian PSEs in terms of size, industry, or regulatory constraints. To counter this, a diverse sample across various industries and firm sizes was selected to enhance representativeness within the study's scope. Furthermore, financial performance metrics like return on assets (ROA) are influenced by external factors such as inflation or government policies, complicating the isolation of lease financing's direct influence. To address this, the study employed statistical methods, specifically regression analysis, ANOVA, to control for confounding macroeconomic variables, thereby potentially enhancing the robustness and reliability of the findings.

1.9.3 Delimitations/Scope

This study focused on the influence of lease financing on the financial performance of commercial Public Sector Enterprises (PSEs) in Namibia, such as NamPower and Telecom Namibia, and excluded non-commercial PSEs, private firms, and non-profits due to their differing financial and operational objectives, which could have confounded the analysis (Marenga, 2020; Minhat & Dzolkarnaini, 2016). It investigated lease financing through financial metrics like return on assets (ROA) and excluded other financing methods, such as public-private partnerships or bank loans, to isolate its effects, as emphasised in financial efficiency studies (Wong & Joshi, 2015).

The geographical scope was limited to Namibia, where unique regulatory frameworks, such as the Procurement Act and State Finance Act, shaped leasing practices and limited generalisability to other countries (Marenga, 2020). The study employed a mixed-methods convergent design, which combined quantitative panel data from 2013 to 2022 (110 observations across 11 PSEs) with qualitative survey data from 23 stakeholders collected in February 2025 (Creswell & Creswell, 2023). The 2013–2022 timeframe provided a decade-long perspective but limited the analysis of longer-term trends, as noted in econometric studies (Gujarati & Porter, 2009). These delimitations ensured a focused investigation into lease financing in Namibian commercial PSEs (Creswell & Creswell, 2023).

1.10 Definitions of Key Terms

Lease Financing: A financial arrangement where a lessee uses an asset owned by a lessor for a specified period in exchange for periodic payments. (Chang, 2025)

Financial Performance: Measured through profitability, liquidity, and gearing, reflecting an organisation's ability to generate revenue and sustain operations. Serves as an evaluation of operational effectiveness, using financial indicators to gauge goal achievement and assess the company's current financial status (Sbaih et al., 2023).

Commercial Public Sector Enterprises (PSEs): Government enterprises mandated to operate commercially and sustainably (Ministry of Finance, 2025).

Liquidity: A firm's ability to meet short-term obligations (Tunji et al., 2022).

Gearing: The proportion of debt-to-equity financing, analysed for its influence on financial risk (Mumba & Kazonga, 2021).

Taxation: Government levies affecting lease financing decisions, including deductions and costs (Younus & Sohail, 2021).

IFRS 16: An accounting standard requiring lease liabilities and assets to be recognised on balance sheets (Sbaih et al., 2023).

Capital Structure: The mix of debt and equity financing, with lease financing as a component (Adeoye et al., 2020).

1.11 Study Outline

Chapter One: Introduction and Background

Provides background on PSEs' financial constraints and lease financing, outlining the problem, objectives, questions, hypotheses, significance, and key terms.

Chapter Two: Literature Review

Explores theoretical frameworks (for example, Modigliani-Miller, pecking order, agency and trade-off theories) and empirical studies on lease financing and financial performance, focusing on profitability, liquidity, and gearing. It identifies research gaps in Namibian PSEs.

Chapter Three: Research Methodology

Details the mixed-methods research approach, including quantitative analysis of financial data and qualitative interviews. It describes the research design, population, sampling and sampling strategy, data collection strategies, and analysis techniques (for instance, regression, financial ratios), addressing ethical considerations and data reliability concerns.

Chapter Four: Data Presentation, Analysis and Interpretation

Presents study findings on lease financing trends, tests hypotheses, and examines relationships between lease financing, profitability, liquidity, and gearing. It discusses firm size's moderating effects.

Chapter Five: Conclusions and Recommendations

Summarises findings, offers policy and practical recommendations for optimising lease financing to enhance financial performance, highlights study limitations, and suggests areas for future research, such as long-term leasing effects and sector-specific comparative analyses.

1.12. Conclusion

This chapter has laid the foundation for the study by establishing the context, rationale, and framework for investigating the influence of lease financing on the financial performance of Namibian public sector enterprises (PSEs). The chapter outlined the research problem, aim, objectives, questions, and hypotheses, emphasising the moderating role of firm size and the significance of financial performance metrics like return on assets (ROA). It also introduced the mixed-methods research strategy, combining quantitative and qualitative approaches under a pragmatic philosophy, to provide a comprehensive understanding of lease financing's implications. The study's relevance to practitioners, policymakers, and academics was discussed, alongside its assumptions, limitations, and delimitations, ensuring a clear scope focused on commercial PSEs in Namibia. Key terms were defined to facilitate clarity, and the chapter concluded with an outline of the study's structure, setting the stage for a detailed exploration of lease financing's impact in subsequent chapters. This foundation positions the research to contribute meaningfully to both theoretical discourse and practical strategies for enhancing the financial sustainability of Namibian PSEs.

CHAPTER 2: LITERATURE REVIEW AND THEORETICAL ANALYSIS

2.1 Introduction

This chapter reviews existing literature on the influence of lease financing on the financial performance of selected public sector enterprises (PSEs) in Namibia. This review directly aligns with the main objective of assessing lease financing's influence on profitability, liquidity, and solvency. The sub-objectives guiding this exploration are: (1) examining the extent of lease financing dependence for investment capital among Namibian PSEs, (2) analysing variables affecting leasing as a substitute or complement to conventional debt financing, and (3) articulating financing policy implications to enhance long-term performance. The review integrates established theoretical frameworks in the domain, explores empirical evidence from diverse contexts, and best practices to identify critical research gaps, particularly the notable absence of Namibia-specific studies. This comprehensive approach justifies the chosen methodology and culminates in a synthesis of the literature and the rationale for the chosen study's conceptual framework.

2.2 Theoretical Literature

Lease financing represents a vital funding mechanism for Namibian PSEs, which frequently face capital constraints despite their crucial role in fostering economic growth and delivering essential services across strategic sectors such as energy and transport (Atseye et al., 2020; Limbo, 2019; Weylandt, 2021). PSEs, unlike purely private entities, often operate with a dual mandate: achieving commercial viability and self-sustainability while simultaneously fulfilling public service obligations. According to OECD (2024), state-owned enterprises often operate under dual objectives: to be financially sustainable and competitive while also delivering public policy

objectives, such as infrastructure development, employment generation, and universal service provision. Hence, by enabling asset use without outright ownership, lease financing can significantly reduce immediate capital expenditure, thereby enhancing their liquidity and preserving cash flow (Bello et al., 2016; Omete & Kajirwa, 2016). However, the mismanagement of lease agreements, stemming from inadequate risk assessment or poor contract negotiation and design, may lead to substantial long-term liabilities and increased financial risk (Asenso, 2021). Effective risk management strategies, as highlighted by Dube et al. (2021a) and Dube et al. (2021b), are therefore crucial to mitigate these potential drawbacks. According to Li et al. (2016), CEO ownership, tax rate, financial distress risk, and firm size exhibit a positive correlation with the share of operating leases, whereas debt ratio, profitability, and asset tangibility show a negative correlation. In contrast, the share of capital leases increases with debt ratio, profitability, firm size, and effective corporate governance, but decreases with CEO ownership and financial distress risk.

Organisational performance, in the context of PSEs, is defined as the extent to which a firm achieves its financial objectives (Bello et al., 2016). Given PSEs' increasing commercial focus on self-sustainability and their mandate to return dividends to the government (Minister of Finance, 2023), financial indicators like profitability, liquidity, and solvency are prioritised (Hermanto et al., 2021; Mumba & Kazonga, 2021). In the literature on organisational financial sustainability, the financial health perspective is most directly aligned with the concept of organisational financial performance (Kuttu, 2024). This perspective emphasises the use of key financial indicators such as revenue diversification, cost-efficiency, profitability, liquidity, solvency, and long-term financial viability as foundational to financial sustainability. This perspective on financial sustainability views strong financial performance not merely as an end, but as a necessary condition for organisational continuity, adaptability, and strategic autonomy (Akingbola & Domanski, 2022; Kakati & Roy,

2021). Scholars adopting this perspective often draw on financial management theory and the resource-based view (RBV), arguing that effective use of internal financial resources and capabilities is critical in enabling organisations to invest in innovation, navigate funding uncertainties, and withstand external shocks (Gupta et al., 2023). Besides, improved financial performance enhances organisational credibility with donors, investors, and stakeholders alike, thereby reinforcing broader organisational legitimacy and long-term sustainability (Young et al., 2021). Thus, while financial performance is not the only determinant of sustainability, it serves as a core operational indicator through which the resilience and strategic capacity of the organisation are made visible and measurable. Often, scholars using this perspective draw on financial decision-making theories and frameworks embedded in corporate finance, such as capital structure theories, investment appraisal models, and working capital management principles in assessing the financial health dimension of organisational financial sustainability (Gupta et al., 2023; Young et al., 2021). Therefore, by adopting the financial health perspective of organisation financial sustainability, this study intends to explore the concept of organisation financial performance by linking it to lease financing.

The prevalent preference for leasing over outright asset purchase in PSEs, driven by factors such as budget constraints and the need for operational flexibility, raises critical questions about its precise influence on these financial performance indicators, necessitating context-specific research (Smith, 2024). Besides, the academic discourse on capital structure and financing decisions has significantly evolved since Modigliani and Miller's (1958) seminal work. This foundational research has paved the way for numerous theories that can be deployed in exploring the influence of lease financing on firm performance, including agency theory, pecking order theory, and trade-off theory (Sindani-Wafula et al., 2016). These theories jointly offer a robust foundation for understanding the complex

role of leasing in financial decision-making and provide critical lenses through which to examine its implications for PSEs, considering their unique operational and governance structures.

2.3 Theoretical Framework

The theoretical framework for this study provides a robust foundation to explore the dynamics of lease financing and its impact on the financial performance of Namibian PSEs. Lease financing is positioned as the primary independent variable, defined as a contractual arrangement that allows PSEs to utilise assets through periodic payments without immediate ownership, thereby influencing their financial strategies and outcomes (Atseye et al., 2020; Omete & Kajirwa, 2016). Financial performance, the dependent variable, may be assessed through a comprehensive set of indicators: profitability (for instance, return on assets and return on equity), liquidity (for example, current and quick ratios), and solvency (for example, debt-to-equity ratio), reflecting the multifaceted financial health and operational efficiency of PSEs (Adoke & Waziri, 2023; Bello et al., 2016). Firm size is incorporated as a moderating variable, hypothesised to modulate the relationship between lease financing and financial performance, with larger PSEs potentially benefiting from economies of scale and enhanced bargaining power, while smaller entities may face greater financial constraints (Muriithi & Waweru, 2021; Venter & Southgate, 2023).

This framework is grounded in several seminal theories of capital structure and organisational behaviour. Pecking order theory by Myers (1984) suggests that firms prefer to finance operations using internal funds first, followed by debt, and lastly equity, due to concerns about information asymmetry and financing costs. In the PSEs, especially those operating under budget constraints and borrowing limits, as seen in Namibia (Amadhila & Iyambo, 2022), lease financing may be adopted as a practical alternative to traditional debt, helping preserve upfront cash flows while

avoiding the scrutiny or rigidity associated with equity-like instruments. The *Agency Theory* by Jensen and Meckling (1976) highlights potential conflicts between government principals and PSE managers, where leasing may reduce monitoring costs and agency issues but could also lead to suboptimal long-term financial decisions if managers prioritise short-term financial gains (Chukwu & Wadike, 2018). *Trade-Off Theory* (Kraus & Litzenberger, 1973; Myers, 1984) posits that firms balance the tax advantages and flexibility of lease financing against the risks of over-leveraging and financial distress, a critical consideration for PSEs operating under fiscal oversight (Paik et al., 2020; Zhang & Liu, 2020).

The framework aligns closely with the study's objectives. First, it facilitates the examination of lease financing dependence for investment capital by analysing how PSEs leverage leasing to acquire assets without straining public budgets, as evidenced by Namibia's recent fiscal policies requiring N\$2.6 billion in dividends from PSEs (Minister of Finance, 2023). Second, it supports the analysis of variables affecting leasing adoption, such as liquidity, gearing, and taxation, by exploring how these factors interact with firm size to influence leasing as a substitute or complement to conventional debt (Alawna, 2021; Mukherjee & Mahakud, 2020). Third, it informs policy recommendations by assessing how firm size moderates leasing outcomes, enabling tailored strategies to enhance long-term financial sustainability in Namibia's PSEs, where capital constraints and regulatory evolution are prevalent (Amadhila & Iyambo, 2022; Asenso, 2021). This approach addresses the identified research gap, particularly the scarcity of context-specific studies in Namibia, and ensures the framework is adaptable to the unique operational and economic challenges facing PSEs in sectors like energy and transport (Marenga, 2020).

2.3.1 Pecking Order Theory

The Pecking Order Theory, articulated by Myers (1984), posits that firms prioritise financing sources based on the principle of minimising information asymmetry and associated costs. The theory suggests a sequential preference: firms first utilise internal funds such as retained earnings, then turn to debt, followed by hybrid instruments like leasing, and only as a last resort, seek external equity. This hierarchy stems from the idea that internal financing avoids the need to disclose sensitive financial information to external parties, while debt and leasing provide structured alternatives with lower perceived risks compared to equity issuance, which may signal undervaluation to investors (Myers, 1984). For Namibian PSEs, which often operate under stringent budget constraints and limited access to conventional long-term capital, this theory provides a compelling rationale for adopting lease financing. The ability to acquire essential assets such as vehicles, machinery, or infrastructure in the energy and transport sectors without depleting scarce cash reserves aligns with their need to maintain operational continuity and meet public service demands (Amadhila & Iyambo, 2022).

Historically, operating leases were favoured for their off-balance-sheet nature and treatment, allowing PSEs to manage assets without immediately impacting traditional debt ratios, a practice that enhanced financial flexibility (Paik et al., 2020). However, the introduction of accounting standards like IFRS 16 has mandated that most leases be recognised on the balance sheet, reducing or eliminating this advantage (Öztürk, 2016). Despite this shift, the inherent flexibility of leasing, enabling asset use without ownership commitments, remains a strategic tool for PSEs facing fiscal pressures. Empirical support from developing contexts, such as Frank et al. (2020) and Nyamita & Dorasamy (2014), reinforces that cash-constrained entities, including PSEs, lean toward leasing to

preserve liquidity, a trend likely mirrored in Namibia given its public sector funding challenges. This theory thus offers a lens to understand why PSEs might prioritise leasing over other financing options, particularly when internal resources are insufficient and equity issuance is impractical due to government ownership structures.

2.3.2 Agency Theory

The Agency Theory, originally developed by Jensen and Meckling (1976), explores the conflicts of interest that arise between principals (for instance, the government as the owner of PSEs) and agents (for example, PSE managers tasked with operational decisions). This theory posits that agents may prioritise personal or short-term organisational goals over the long-term interests of principals, leading to inefficiencies or misaligned strategies (Dawar, 2014). In the context of lease financing, this framework highlights how leasing can serve as having two-sided advantage. On one hand, it may reduce external financing costs by mitigating issues stemming from asymmetric information where managers possess more detailed knowledge about the firm's operations than the government, thus lowering the need for extensive monitoring or collateral requirements typically associated with traditional debt (Sindani-Wafula et al., 2016). Lessors, specialising in asset financing, often have superior expertise in monitoring asset utilisation, which can further enhance efficiency (Cosci et al., 2015).

However, the division of ownership and control inherent in leasing introduces complexities. Managers might opt for leasing to avoid the perceived risks or scrutiny linked to large capital expenditures or long-term debt, potentially leading to decisions that do not align with the PSE's overarching financial sustainability (Cosci et al. 2015). For instance, a manager might choose a

short-term, high-cost lease to quickly address service delivery needs, such as acquiring transport vehicles, rather than pursuing a more cost-effective long-term purchase or lease that better serves fiscal health (Choi et al., 2018; Dawar, 2014). This misalignment is particularly pronounced in PSEs, where state ownership introduces additional layers of principal-agent dynamics. Zhang and Liu (2020) argue that government objectives such as ensuring social welfare or regional development may conflict with commercial profitability, influencing lease structuring and increasing the risk of hidden liabilities. For Namibian PSEs, this suggests a need for governance mechanisms to align managerial incentives with public goals, thereby ensuring that leasing enhances rather than undermines financial performance (Aremo & Ayorinde, 2022).

2.3.3 Trade-Off Theory

Trade-Off Theory, proposed by Kraus and Litzenberger (1973) and expanded by Ross (1977), asserts that firms optimise their capital structure by balancing the benefits of debt, such as tax shields and reduced cost of capital, against the potential costs of financial distress and bankruptcy. Applied to lease financing, this theory views leases as a debt substitute or complement, offering tax advantages through deductible lease payments that mirror interest deductions on loans. This fiscal benefit can be particularly appealing for PSEs, which operate under public budget constraints and seek to maximise operational funds (Paik et al., 2020). However, the theory warns that over-reliance on leasing can elevate a firm's leverage, increasing the risk of over-leveraging where fixed lease obligations outstrip cash flows, potentially leading to operational disruptions or default altogether (Ai et al., 2020; Nyamita et al., 2014).

Li et al. (2016) provide empirical insight, noting that as leasing increases, it can raise the marginal cost of financing, prompting firms to reduce non-lease debt to maintain an optimal capital structure.

For PSEs, this dynamic is critical, as excessive lease commitments could jeopardise financial stability, especially under government oversight where fiscal deficits are a concern (Minister of Finance, 2023). Mukherjee and Mahakud (2020) further suggest that taxation policies in various contexts influence this balance, with lease payments offering tax relief compared to depreciation on owned assets, though specific Namibian tax incentives in this regard remain underexplored. The theory thus encourages a strategic approach, where PSEs must assess the trade-off between short-term liquidity gains and long-term financial risks. In the Namibian context, where infrastructure investments are pressing, this framework highlights the importance of aligning lease strategies with broader fiscal policies to avoid unsustainable debt levels, a challenge compounded by limited local data on leasing outcomes (Smith, 2024).

2.4 Research Themes and Empirical Evidence

The following themes reflect the research objectives, integrating empirical evidence to assess lease financing, dependence, adoption variables, and policy implications in Namibian PSEs.

2.4.1 Extent of Lease Financing Dependence and Financial Performance

This theme examines the extent to which Namibian PSEs depend on lease financing for investment capital and its influence on financial performance. Lease financing enables PSEs to acquire critical assets, such as infrastructure in the energy and transportation sectors, without significant upfront capital outlay, thereby enhancing financial performance through improved liquidity, profitability, and efficiency (Mwangi & Murigu, 2019). In Namibia, PSEs increasingly rely on leasing to modernise infrastructure and expand service delivery amidst persistent budget constraints and limited direct government funding (Amadhila & Iyambo, 2022). This reliance aligns with the

Pecking Order Theory, where PSEs, facing financial constraints, prioritise financing options that preserve cash flows.

Empirical studies from other developing economies offer mixed insights. Kariuki (2020) found that leasing positively influences return on assets (ROA) and asset utilisation in Kenyan PSEs, suggesting enhanced profitability and efficiency. However, Asenso (2021) notes that while leasing offers short-term benefits, it can lead to significant long-term liabilities if not managed prudently, potentially reducing solvency. Callimaci et al. (2011) identified leverage, tax position, and firm size as key determinants of leasing propensity in Canadian firms, suggesting similar factors may drive Namibian PSEs' dependence. To quantify dependence and influence, a regression model will assess lease-to-asset ratios against ROA. Best practices, such as rigorous cost-benefit analyses and transparent accounting, are crucial for ensuring the effective utilisation of lease financing (Omolo, 2020), addressing the identified gap in Namibia-specific research (Smith, 2024).

2.4.2 Variables Affecting Lease Financing Adoption

This theme analyses variables affecting leasing as a replacement for or complement to conventional debt financing. Key variables influencing lease financing adoption include liquidity needs, tax benefits, leverage, asset specificity, growth opportunities, firm size, ownership structure, and regulatory frameworks.

The Pecking Order Theory suggests that PSEs, facing financial constraints and information asymmetry, prefer leasing to preserve cash flows over traditional debt (Cosci et al., 2015; Foda et al., 2022; Frank et al., 2020; Hafiz Bin Bakar & Norbaya Binti Yahaya, 2016; Nyamita et al., 2014). The Agency Theory indicates that managers may favour leasing to reduce monitoring costs and avoid ownership risks, although this might inadvertently increase long-term costs if not properly

managed (Choi et al., 2018; Dawar, 2014; Rao Chigurupati, 2020). Trade Off Theory highlights tax shields and financial constraints as drivers but also warns of over-leveraging risks that can deter adoption (Li et al., 2016; Asenso, 2021).

The question of whether leases act as substitutes or complements to debt is critical. Paik et al., (2020) provide insights from an analysis of debt covenants, suggesting that this relationship is nuanced and depends on specific firm characteristics and market conditions. For PSEs, leasing might complement traditional debt by providing access to assets when conventional borrowing limits are reached, or it might substitute debt if it offers more flexible terms or better aligns with short-term fiscal objectives. Morais (2014) identified firm size, industry, and ownership as key factors in lessee firms, while Muriithi and Waweru (2021) specifically examined the role of leasing in financing decisions for small and medium enterprises, which can offer transferable insights to PSEs. In Namibia, limited capital access and evolving regulatory frameworks significantly shape leasing decisions (Amadhila & Iyambo, 2022). Mwenda & Mutunga (2021) found that robust regulatory frameworks enhance adoption by ensuring transparency and reducing perceived risks. The regression model will analyse liquidity (using current and quick ratios), gearing (debt-to-equity), taxation (tax ratio to profit before tax), and firm size (total assets) to identify the primary drivers of lease financing adoption, thereby addressing the current lack of Namibia-specific empirical evidence.

2.4.3 Policy Implications for Lease Financing Strategies

This objective aims to articulate a policy on financing strategies to promote lease financing and enhance long-term financial performance within Namibian PSEs. Lease financing can reduce immediate fiscal burdens on the government, enabling PSEs to acquire essential assets without

straining national budgets. However, poorly managed long-term lease obligations may paradoxically increase public debt and contingent liabilities (Amadhila & Iyambo, 2022; Asenso, 2021).

Shikongo (2021) emphasises the need for stronger regulations and enhanced capacity building for Namibian PSE managers to optimise leasing strategies and ensure their alignment with national development goals. Comparative studies, such as Kariuki (2020) on Kenyan PSEs, demonstrate the benefits of clear and supportive regulatory frameworks in promoting effective lease financing. Osei and Boadi (2020) provide broader policy recommendations for promoting lease financing in developing economies, including the establishment of supportive legal and regulatory environments, tax incentives, and capacity-building programmes. Callimaci et al., (2011) and Li et al. (2016) suggest that aligning leasing decisions with broader tax and leverage strategies is crucial to maximise financial benefits and ensure long-term sustainability. Best practices, including transparent accounting, robust risk management frameworks, and continuous training for managers, are essential to balance short-term gains with long-term financial sustainability (Omolo, 2020). The regression model analyses the influence of lease financing on financial performance, considering how fiscal indicators (for instance, fiscal deficit, public debt levels) might influence policy choices, ultimately ensuring that lease financing contributes positively to financial sustainability and aligns with Namibia's national development objectives.

2.5 Study Variables and Hypotheses

2.5.1 Dependent Variable

The dependent variable for this study is financial performance, which measures the extent to which a firm has achieved its financial or monetary objectives (Bello et al., 2016). Financial performance

measures how well an organisation meets its monetary goals, often using quantitative metrics like return on assets, return on equity, earnings per share, net assets per share, and return on investment (Chukwu et al. 2018). For this study, as with other studies on lease and performance (Bello et al. 2016; Kajirwa & Ikapel, 2016; Sindani-Wafula et al., 2016), financial performance was measured by Return on Assets (ROA), a key profitability indicator assessing how efficiently a firm uses its assets to generate profits. However, the analysis also considered liquidity and gearing as other crucial dimensions of financial performance for PSEs.

2.5.2 Independent Variables

Lease Financing: A lease is a contractual agreement between an owner (the lessor) and another party (the lessee), granting the lessee the right to use the leased asset in exchange for periodic payments (Atseye et al., 2020). In this study, these payments are referred to as leases or lease financing. Leasing allows companies to access and utilise assets without large upfront costs, offering flexibility in managing obsolescence and residual risks while maintaining liquidity to maximise shareholder returns (Tunji et al., 2022). For empirical analysis, lease financing will be operationalised as the ratio of total lease payments to total assets. Lease financing serves as a key independent variable in models evaluating its impact on financial performance under IFRS 16, which requires recognising lease liabilities and right-of-use assets. Proxies like lease expense or liability, measured as the ratio of lease payments to total assets, reflect leasing intensity and affect profitability and leverage (Morales-Díaz & Zamora-Ramírez, 2018; Tunji et al., 2022). Endogeneity, stemming from potential reverse causality, can be addressed using moderating variables (Goodacre, 2003), thereby ensuring robust analysis (Giner et al., 2018). This led to the following hypothesis:

H₁: Lease financing has a significant positive influence on the financial performance of Namibian PSEs.

Liquidity: refers to the available cash or the firm's ability to convert assets quickly into cash to meet short-term obligations (Bakar et al., 2016; Mumba & Kazonga, 2021). Leasing enhances liquidity by reducing the need for significant initial capital outlays, thereby supporting operational flexibility and financial performance (Mutai et al., 2025). In this study, the authors suggest that operating leases and leverage financing positively and significantly influence financial performance by reducing upfront asset acquisition costs, thereby helping firms preserve liquidity and flexibility. Hence, this study will measure liquidity using the current ratio (current assets divided by current liabilities) and the quick ratio (current assets minus inventory, divided by current liabilities). Consequently, the following hypothesis was formulated:

H₂: Liquidity has a significant positive influence on the financial performance of Namibian PSEs.

Gearing: refers to the proportion of a firm's debt to its assets, indicating the firm's financial leverage (Bello et al., 2016). High gearing levels may signal increased financial risk, influencing the reliance on lease financing as an alternative to traditional debt. Alawna (2021) highlights the influence of gearing ratios on lease financing adoption in emerging economies. Consequently, higher gearing levels are positively associated with lease financing adoption; essentially, firms substitute leasing for additional debt to manage leverage levels (Lau, 2022). Therefore, leasing helps maintain liquidity and operational flexibility, leading to improved financial performance by avoiding large capital outlays, spreading costs over time, and reducing asset obsolescence risks

(Shiyanbola et al., 2022). In this study, gearing was measured by the debt-to-equity ratio. Hence, the following hypothesis was formulated for the study:

H₃: Gearing has a significant negative influence on the financial performance of Namibian PSEs.

Taxation: Younus and Sohail (2021) suggest that the presence of lease financing can reduce tax and interest payments, thus improving financial performance. Additionally, Sari, Altintas, and Tas (2016) suggest that companies using operating leases reported significantly lower liabilities and higher income, improving their profitability and liquidity. Similarly, firms with higher effective tax rates or high leverage are more likely to adopt capital leases to defer taxes and interest costs (Park & Na, 2021). leading to improved profitability. Taxation, in this study, is defined as the tax ratio to profit before tax (Younus & Sohail, 2021), providing a measure of how tax policies and their implications affect leasing decisions. Mukherjee and Mahakud (2020) and Mahakud (2020) further underscore the role of taxation policies in influencing lease financing adoption. The following hypothesis was suggested:

H₄: Taxation has a significant influence on the financial performance of Namibian PSEs.

2.5.3 Moderating Variable

A moderating variable is a variable that influences the strength or direction of the relationship between an independent variable and a dependent variable, changing the nature or magnitude of their relationship (Mahmood et al., 2019).

Firm Size: While there are many measures of firm size, this study defines firm size in terms of total assets and uses it as the moderating variable (Tunji et al., 2022). Empirical studies suggest that

firm size moderates the lease financing-performance link, with large firms more likely to experience performance improvements from leasing due to resource advantages, cost efficiencies, and greater bargaining power (Venter & Southgate, 2023; Muriithi & Waweru, 2021). Drawing on Mahmood et al. (2019), firm size moderated the relationship between working capital finance (WCF) and profitability, with small firms showing an inverted U-shaped relationship (break-even point at 0.68) and large firms a U-shaped relationship (break-even point at 0.50), reflecting differences in financial constraints and credit access. In this study, firm size similarly moderated the lease financing–ROA relationship, where larger PSEs benefited from better financing conditions, as supported by the high correlation (0.891, $p < 0.001$) between lease financing and firm size. This suggested that scale-driven dynamics amplified the positive effects of lease financing on financial performance in larger firms, consistent with their ability to leverage assets for cost-effective leasing (Aremo & Ayorinde, 2022). Conversely, smaller PSEs faced higher financial constraints, potentially limiting leasing benefits, aligning with Lin and Wang’s (2017) findings that firm size positively influenced operating lease share in Chinese SMEs due to better capital market access. Firm size moderates the relationship between lease financing and organisational financial performance by influencing the capacity, structure, and outcomes of lease-related decisions.

Larger firms often benefit from stronger creditworthiness, greater market power, and economies of scale, which enable them to negotiate more favourable leasing terms such as lower implicit interest rates, longer repayment periods, or access to high-quality leased assets. These advantages enhance the efficiency and profitability of leasing arrangements, positively impacting financial performance (Jain & Yadav, 2020). Larger firms also typically have more sophisticated financial management systems, allowing them to integrate leased assets into operational strategies more effectively, which potentially enhances their return on assets and capital productivity (Tang et al., 2022). In contrast,

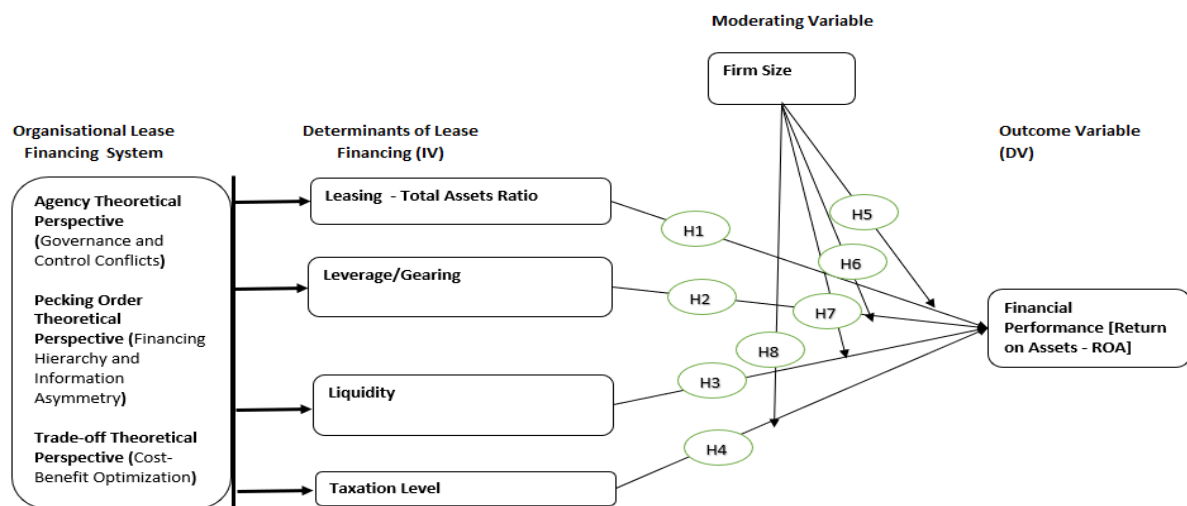
smaller firms may turn to leasing out of necessity rather than strategy, often due to restricted access to traditional financing options such as bank loans or equity markets. For these firms, leasing offers an alternative means to acquire essential equipment without substantial upfront capital expenditure (Gill et al., 2023). However, their weaker negotiating power and higher perceived risk can lead to less favourable lease terms, potentially limiting the financial benefits. Moreover, smaller firms may lack the scale or efficiency to maximise the utility of leased assets, resulting in marginal or even negative financial returns (Aboody et al., 2021). Thus, firm size affects not only access to and structure of lease financing but also the efficiency with which leased resources are converted into financial gains. This underscores the importance of considering firm size as a moderating variable when assessing the financial outcomes of lease financing. This led to the formulation of the following interactive hypotheses:

- H₅: Firm size significantly moderates the relationship between lease financing and the financial performance of Namibian PSEs, altering the strength or direction of the influence.
- H₆: Firm size significantly moderates the relationship between gearing and the financial performance of Namibian PSEs, altering the strength or direction of the influence.
- H₇: Firm size significantly moderates the relationship between liquidity and the financial performance of Namibian PSEs, influencing the strength of the relationship.
- H₈: Firm size significantly moderates the relationship between taxation and the financial performance of Namibian PSEs, influencing the strength of the relationship.

2.6 The Study Conceptual Framework

The conceptual framework depicts both the main and interaction effects between the research variables. The relationships between the independent variables (lease financing, liquidity, gearing, taxation), the moderating variable (firm size), and the dependent variable (financial performance, measured as Return on Assets (ROA)) are shown in Figure 1.1. While ROA is the primary measure for financial performance in the regression model, the study acknowledges that profitability, liquidity, and solvency are intertwined dimensions of overall financial health.

Figure 1: Conceptual Framework



Source: Author (2025)

The figure illustrates the conceptual model where financial performance (dependent variable) is regressed against independent variables (lease financing, liquidity, gearing, and taxation), with firm size acting as the moderating variable. This model allows for the investigation of direct influences as well as how firm size alters these relationships.

Empirical studies on lease financing and financial performance have yielded mixed results across different contexts. Asenso (2020) found positive influences in Kenya, while Mwangi and Murigu (2021) note the risks of increased long-term obligations and over-leveraging. Callimaci et al., (2011), Morais (2014), and Li et al. (2016) highlight firm size, leverage, and tax considerations as key determinants of lease financing decisions. However, a significant research gap persists, as no comprehensive studies specifically address the unique context of Namibian PSEs (Amadhila & Ikhide, 2022; Smith, 2024). This necessitates tailored research to understand the specific dynamics and policy implications within the local environment.

2.7 Synthesis of Literature

The reviewed literature consistently underscores lease financing's dual role as both a facilitator of asset acquisition and a potential source of financial risk, aligning well with the study's objectives. Agency Theory provides valuable insights into managerial conflicts and information asymmetry in adoption decisions, but its traditional private-sector focus may overlook the unique social and developmental objectives inherent to PSEs (Barney & Harrison, 2020; Choi et al., 2018). The Pecking Order Theory effectively explains the preference for leasing as a debt alternative, particularly for cash-constrained entities, but its applicability to PSEs is nuanced given their distinct budget allocation processes and limited access to conventional capital markets (Nyamita et al., 2014). Trade-Off Theory offers a framework for balancing the benefits of lease financing (for example, potential tax advantages) against its risks (for instance, over-leveraging), though its practical application requires careful contextual adaptation to Namibia's specific tax and regulatory environment (Nyamita et al., 2014).

Empirical evidence from various countries presents a mixed picture: positive influences on financial performance have been observed in contexts like Kenya and Nigeria (Chukwu & Wadike, 2018; Kariuki, 2020), while others highlight the risks of increased long-term obligations and potential over-leveraging (Asenso, 2021). Studies by Callimaci et al., (2011), Morais (2014), and Li et al. (2016) identified key drivers of lease adoption, including firm size, leverage, and tax considerations. Crucially, the persistent lack of Namibia-specific studies on lease financing within its public sector enterprises highlights a significant research gap (Smith, 2024). The integration of these theoretical frameworks, coupled with a critical review of empirical findings, ensured that the study's conceptual framework is robust and directly addressed the objectives of examining dependence, adoption variables, and policy implications, providing a tailored and relevant basis for research within Namibia's PSE context.

2.8 Conclusion

This chapter has synthesised theoretical and empirical literature to establish a comprehensive framework for studying the influence of lease financing on Namibian PSEs' financial performance. By merging key research themes with relevant empirical evidence, it directly reflects the study's objectives of assessing the influence of lease financing on financial performance, the extent of dependence on lease financing, the variables affecting its adoption, and the resulting policy implications. The conceptual framework, incorporating the depicted model, clearly defined variables, and testable hypotheses, addresses critical gaps in private-sector-focused theories and, most importantly, the absence of Namibia-specific research. This tailored approach ensures that the findings will be highly relevant and actionable, providing valuable guidance for policymakers and

PSE managers in optimising lease financing strategies to enhance long-term financial sustainability and support national development goals within Namibia.

CHAPTER 3: RESEARCH METHODOLOGY AND DESIGN

3.1 Introduction

This chapter sets out the research methodology and design employed to assess the influence of lease financing on the financial performance of selected Namibian Public Sector Enterprises (PSEs). An explanatory sequential design (ESD) of mixed-methods research (MMR) was adopted, emphasising quantitative panel data analysis followed by qualitative thematic analysis to address the research objectives and test hypotheses H1 to H8, as outlined in Chapter 1. The methodology ensured a rigorous and systematic investigation into lease financing in enhancing financial outcomes and reducing reliance on government subsidies, aligning with best practices in social science research (Creswell & Clark, 2017). The chapter covers the research philosophy, approach, design, data collection methods, population, sampling and sampling strategies, analytical framework, data quality control, ethical considerations, and limitations.

3.2 Overview of the Problem and Purpose

The study investigates the extent of lease financing usage among Namibian PSEs, identifies factors driving its adoption, and evaluates its influence on financial performance, measured by return on assets (ROA). The research addressed the challenge of PSEs' dependence on government subsidies, which burdens public finances, by exploring lease financing as an alternative to traditional debt financing (Marenga, 2020). The objectives included analysing the direct effects of lease financing, leverage, liquidity, and taxation on ROA, and assessing the firm size's moderating role. ESD of MMR combines quantitative financial data analysis with qualitative stakeholder insights to provide a comprehensive understanding of leasing's implications for PSEs (Saunders et al., 2009).

3.3 Research Philosophy

This study adopts a pragmatist philosophy to guide an explanatory sequential mixed-methods design, blending post-positivist and interpretivist approaches to explore lease financing in Namibian PSEs (Creswell & Creswell, 2023; Gobo, 2023). Critical realism supports pragmatism by positing a stratified reality with underlying mechanisms, such as economic structures, shaping lease financing, thus grounding the pragmatic methodology in a realist ontology (Archer et al., 2021). The first phase, the quantitative phase, used post-positivist methods, assuming an objective reality, to test hypotheses on lease financing on financial performance, the variables influencing its adoption, and how firm size moderates the relationship (Saunders et al., 2023; Toyon, 2021). Critical realism informs hypotheses about structural factors, like regulations (Agyemang, 2023; Archer et al., 2021). The second phase, which is the qualitative phase, employed interpretivist methods to investigate stakeholders' perspectives on financing decisions (Flick, 2022; Gobo, 2023), with critical realism contextualising these within structural constraints (Amadhila & Iyambo, 2022; Archer et al., 2021). Pragmatism underpins the explanatory sequential design, analysing quantitative data for patterns, then qualitative data for explanations, balancing measurable outcomes with contextual insights (Teddle & Tashakkori, 2021; Toyon, 2021). Critical realism ensures focus on causal mechanisms, strengthening the pragmatic approach to lease financing in Namibian PSEs (Venter & Southgate, 2023).

3.3.1 Epistemological Stance

This study adopted a pragmatist epistemology stance, blending post-positivist and interpretivist stances (Creswell & Creswell, 2023; Teddle & Tashakkori, 2021). Critical realism grounds this epistemology, positing underlying mechanisms, such as economic structures, that shape financing

decisions (Archer et al., 2021). The quantitative phase employs post-positivism, testing hypotheses on lease financing's impact on return on assets (ROA) while recognising limitations like measurement errors and unobserved heterogeneity (Saunders et al., 2023; Toyon, 2021). Evidence supports lease financing's effect on PSE performance (Aboody et al., 2021; Venter & Southgate, 2023). The qualitative phase uses interpretivism to capture stakeholders' perspectives on financing decisions, contextualised within structural constraints like regulations (Amadhila & Iyambo, 2022; Flick, 2022; Gobo, 2023). This epistemology, supported by critical realism, balances measurable outcomes with contextual insights for a robust analysis (Gobo, 2023).

3.3.2 Ontological and Axiological Assumptions

Ontologically, the study assumed a singular reality for financial metrics like ROA, measurable through standardised indicators, but recognised multiple realities in stakeholders' perceptions of leasing practices (Creswell & Creswell, 2023). Axiologically, value neutrality was maintained in quantitative analysis through robust statistical methods, while qualitative analysis acknowledged the researchers' influence in interpreting narratives, mitigated by systematic coding in ATLAS.ti (Friesen et al., 2018).

3.4 Research Approach

A mixed-methods approach was employed, integrating deductive and inductive reasoning. The quantitative component used deductive reasoning to test hypotheses H_1 to H_8 , derived from literature on lease financing and financial performance (Sindani et al., 2016; Wong & Joshi, 2015). Hypotheses were tested using regression models to establish causal relationships. The qualitative component used inductive reasoning, generating themes from stakeholder responses to explore leasing's practical implications without preconceived hypotheses (Saunders et al., 2009). This combination ensured statistical rigour and contextual depth.

3.5 Research Design and Strategy

The study adopted an Explanatory Sequential Design (ESD) of Mixed-Methods Research (MMR), first grounded in a post-positivist research philosophy, which posits that an objective reality exists but is only imperfectly knowable due to the complexity of social phenomena and limitations in human observation (Creswell & Creswell, 2023; Phillips & Burbules, 2000). In the ESD, quantitative data were collected and analysed first, followed by qualitative data collection and analysis to explain and contextualise the quantitative results, with integration of both phases to address the research objectives of assessing lease financing's influence on the financial performance of selected Namibian PSEs (Creswell & Plano Clark, 2017; Toyon, 2021). The quantitative phase employed panel data analysis, including regression analysis, to test hypotheses H1 to H8, examining financial performance metrics such as return on assets (ROA) and the reduction of reliance on government subsidies (Purwanto et al., 2023). The qualitative phase utilised thematic analysis of semi-structured interviews with key stakeholders to explore the drivers and challenges of lease financing adoption, providing nuanced insights into organisational policy and contextual factors that quantitative data alone could not fully capture (Denzin & Lincoln, 2011).

The ESD was selected to leverage the complementary strengths of quantitative and qualitative approaches within a post-positivist framework, which emphasises probabilistic knowledge and critical reflexivity to approximate reality (Purwanto et al., 2023; Toyon, 2021). The quantitative phase offered an objective assessment of lease financing's impact on financial outcomes, testing causal relationships through regression models, while the qualitative phase enriched the findings by elucidating subjective perspectives, such as managerial attitudes or regulatory barriers, that influence leasing practices in Namibian PSEs (Denzin & Lincoln, 2011). Integration of the two

phases was achieved through joint displays and data triangulation, combining statistical trends with qualitative narratives to provide a comprehensive understanding of the research problem (Creswell & Plano Clark, 2017).

The methodology was structured using the Sounder's Research Onion framework, which provided a systematic approach to designing the study, from philosophical foundations to data collection and analysis (Saunders et al., 2009). The Research Onion guided the selection of a post-positivist philosophy, a mixed-methods strategy combining deductive (quantitative) and inductive (qualitative) approaches, and specific techniques, such as surveys for quantitative data and interviews for qualitative data.

Study Location

The study was conducted in Namibia, focusing on 11 PSEs operating in sectors such as utilities, transport, and telecommunications. Data collection occurred primarily in Windhoek, where most PSEs are headquartered, and extended to other urban centres with significant operations, reflecting Namibia's centralised public sector structure (Marenga, 2020).

3.6 Study Population

Namibia has 73 public enterprises defined under the Public Enterprises Governance Act 2019. Of which 20 are classified as commercial public enterprises. Therefore, the population of this study comprised all Namibian PSEs registered under the Public Enterprises Governance Act, approximately 20 entities in 2022 (Institute for Public Policy Research, 2025). The quantitative component targeted PSEs with complete financial data from 2013 to 2022. The qualitative component

included stakeholders (executives, managers, supervisors, employees) involved in financial decision-making or leasing operations within these PSEs.

3.7 Sampling Strategies and Sample Size

For the quantitative analysis, purposive sampling was used to select 11 PSEs with complete financial data over 2013–2022, resulting in a balanced panel dataset of 110 observations (11 PSEs × 10 years). This sample size was adequate for panel data analysis, balancing statistical power and data availability (Gujarati Porter, 2022). For the qualitative analysis, convenience sampling selected 23 participants who completed a survey from February 14 to 23, 2025, based on their expertise and availability. The qualitative sample size was determined by thematic saturation, achieved after 23 responses (Braun & Clarke, 2006).

3.8 Data Collection Methods

3.8.1 Secondary Data Collection

Quantitative data were sourced from PSEs' annual reports and financial statements for 2013–2022, obtained from their respective websites and, where necessary, annual reports published in a hard copy format were obtained. Variables included:

Financial Performance: ROA, winsorised at 1% and 99%.

Lease: Lease financing in millions of Namibian Dollar (NAD).

Leverage: Debt-to-equity ratio.

Liquidity: Current ratio.

Taxation: Effective tax rate, winsorised.

Firm Size: Firm size in thousands of NAD, centred. Data were pre-processed by scaling and winsorising to mitigate outliers, and centring firm size to reduce multicollinearity (Field, 2018).

3.8.2 Primary Data Collection

Qualitative data were collected via a survey conducted from February 14 to 23, 2025, with 13 open-ended questions on lease financing adoption, asset types, benefits, challenges, costs, regulations, and outcomes. The survey was distributed electronically to 30 stakeholders, yielding 23 responses (77% response rate). Participants included executives, managers, supervisors, and employees with varying experience levels (1–3 to over 10 years).

3.9 Measurements and Instruments

3.9.1 Analytical Framework

The quantitative analysis employed two regression models:

i. Non-Moderated Model:

$$\text{Financial Performance}_{it} = \beta_0 + \beta_1 \text{Lease_financing}_{it} + \beta_2 \text{Leverage}_{it} + \beta_3 \text{Liquidity}_{it} + \beta_4 \text{Taxation}_{it} + \varepsilon_{it} \dots\dots\dots, \text{Eq. 1a}$$

ii. Moderated Model:

$$\begin{aligned} \text{Financial_Performance}_{it} = & \beta_0 + \beta_1 \text{Lease_financing}_{it} + \beta_2 \text{Leverage}_{it} + \beta_3 \text{Liquidity}_{it} + \beta_4 \\ & \text{Taxation}_{it} + \beta_5 \text{Firm_Size}_{it} + \beta_6 (\text{Lease_financing}_{it} \times \text{Firm_Size}_{it}) + \beta_7 (\text{Leverage}_{it} \\ & \times \text{Firm_Size}_{it}) + \beta_8 (\text{Liquidity}_{it} \times \text{Firm_Size}_{it}) + \beta_9 (\text{Taxation}_{it} \times \text{Firm_Size}_{it}) + \varepsilon_{it} \dots\dots, \text{Eq.1b} \end{aligned}$$

Dependent Variable: ROA calculated as net income divided by total assets. Independent Variables: Lease financing, Leverage, Liquidity, Taxation. Moderating Variable: Firm Size_c. Interaction Terms: Captured the firm size's moderating effects.

The qualitative analysis used thematic analysis, with ATLAS.ti version 24.2 to code survey responses into themes (for example, asset types, benefits) following Braun and Clarke's (2006) framework.

3.10 Data Quality Control

3.10.1 Quantitative Data

3.10.1.1 Reliability and Validity

Reliability ensured consistent measurement outcomes across similar conditions, while validity confirmed that data accurately represented the research constructs (Taherdoost, 2018). The following validity aspects were addressed:

- i. *Construct Validity*: Variables (lease financing, leverage, liquidity, taxation, firm size) were defined based on established financial theory and prior research, ensuring theoretical alignment (Taherdoost, 2018).
- ii. *Content Validity*: Measurements, such as ROA for financial performance and debt-to-equity ratio for leverage, comprehensively captured the constructs (Adhikary & Kutsuna, 2016).
- iii. *Criterion Validity*: Variables correlated with validated measures of financial performance and leasing, as supported by literature (Adhikary & Kutsuna, 2016).

Reliability was ensured through consistent preprocessing (scaling, winsorising, centring) of financial data sourced from PSEs' annual reports. The Durbin-Watson statistic assessed autocorrelation in regression residuals (Okta & Meina, 2025). Validity was evaluated through:

- i. *Multicollinearity*: The Variance Inflation Factor (VIF) detected inflated standard errors. Non-moderated models maintained VIFs < 5, while moderated models addressed high

VIFs (e.g., 31.13 for Lease x Firm Size) using robust standard errors (Vatcheva & Lee, 2016).

- ii. *Heteroscedasticity*: The Breusch-Pagan test verified constant residual variance (Djalil & Terzic, 2021).
- iii. *Model Specification*: The Ramsey RESET test checked for omitted variables or incorrect functional forms in non-moderated and moderated models (Kautish & Khare, 2022).
- iv. *Panel Data Model Selection*: The Hausman test determined fixed or random effects suitability for the panel structure (Company_ID and Year) (Okta & Meina, 2025).

Additional diagnostics included the Shapiro-Wilk test for residual normality (Ahmed & Ishtiaq, 2021), the Modified Wald test for panel data heteroskedasticity (Jochmans, 2022), and the Levin-Lin-Chu test for stationarity across 2013–2022 (Arema & Ayorinde, 2022). Robustness was enhanced through time-fixed effects, sub-sample analysis, and alternative scaling of variables like lease financing (millions of NAD) and firm size (thousands of NAD) (Bouichou et al., 2022). Correlation analysis (see Table 4) supported these checks, revealing strong relationships (e.g., lease financing and firm size: 0.891, $p < 0.001$; lease financing $\times$ firm size: 0.947, $p < 0.001$) and potential multicollinearity among interaction terms (for example, 0.972 between Lease Financing $\times$ Firm Size and Liquidity $\times$ Firm Size), which was addressed in regression diagnostics. These measures ensured reliable and valid quantitative results.

3.10.2 Qualitative Data

3.10.2.1 Trustworthiness

For the qualitative component, which explored stakeholders' perspectives on lease financing decisions in Namibian PSEs, trustworthiness was established through credibility, transferability,

dependability, and confirmability (Shenton, 2004). This ensured rigour in interpreting contextual factors that complemented the quantitative findings.

- i. *Credibility*: The findings were grounded in data through a systematic thematic analysis of stakeholder interviews, triangulated with quantitative results (e.g., correlation findings), and validated via peer review to ensure alignment with research objectives (Braun & Clarke, 2006).
- ii. *Transferability*: Detailed descriptions of PSEs' contexts and leasing practices enabled readers to assess the applicability of findings to other settings (Forero et al., 2018).
- iii. *Dependability*: A transparent methodological overview, including documented coding processes and analytical steps, ensured replicability (Forero et al., 2018).
- iv. *Confirmability*: Researcher bias was mitigated through triangulation with quantitative data, reflexive acknowledgement of perspectives, and clear documentation of limitations (Shenton, 2004).

Trustworthiness was further supported by achieving data saturation during thematic analysis and aligning themes with the study's aim to understand scale-driven leasing dynamics, as identified in the quantitative phase (for example, the moderating role of firm size). This qualitative component, guided by the pragmatist philosophy (Morgan, 2007), complemented the regression analysis by providing contextual insights into the quantitative patterns, enhancing the study's overall rigour (Clarke, 2006).

3.11 Data Analysis

Quantitative data were analysed using Stata, estimating pooled OLS, FE, and random effects (RE) regressions. The moderated FE model was preferred based on Breusch-Pagan LM, F-test, and Hausman tests. Diagnostics included variance inflation factors (VIF) for multicollinearity, Breusch-Pagan and Modified Wald tests for heteroskedasticity, Shapiro-Wilk for normality, Ramsey RESET for misspecification, and Levin-Lin-Chu test for stationarity (Gujarati Porter, 2022). Robustness checks included time fixed effects, sub-sample analysis, alternative scaling, and first-differencing.

Qualitative data were analysed using ATLAS.ti, following Braun and Clarke's (2006) six-phase framework: familiarisation, initial coding (150 codes), theme searching, theme reviewing, theme definition, and finally reporting. Code-document tables and network visualisations helped quantify theme frequencies and relationships (Frieze et al., 2018).

3.12 Ethical Consideration

Ethical considerations were paramount in this study, ensuring the protection of participants' rights and well-being while maintaining research integrity. The study adhered strictly to the ethical guidelines of the Namibia University of Science and Technology (NUST), which provided a framework for ethical conduct across both quantitative and qualitative components. These considerations encompassed informed consent, confidentiality, anonymity, participants' right to withdraw, protection from harm, restricted data use, and the maintenance of objectivity and impartiality, as detailed below.

3.12.1 Informed Consent

Informed consent was obtained from all qualitative participants, specifically stakeholders (for instance, PSE managers, financial officers) who completed an online survey assessing lease financing decisions. Approvals (Appendix D) were obtained from the PSEs to allow participants to complete the online survey. Participants received clear, written information about the study's purpose, scope, and procedures, including the voluntary nature of participation and their right to withdraw at any time without consequences. Consent was implied by participants clicking "Next" to access the online survey, as outlined in the consent form, which also confirmed that data would be used solely for research purposes. For the quantitative component, informed consent was not applicable, as data were sourced from publicly available annual financial reports of the 11 PSEs (2013–2022), involving no direct human participation (Creswell & Plano Clark, 2017).

3.12.2 Confidentiality and Anonymity

Confidentiality and anonymity were rigorously upheld to protect participant identities and sensitive information. For qualitative data, stakeholder identities were anonymised through pseudonyms or codes (e.g., Participant A, Participant B) in all transcripts, reports, and publications. Interview data were stored securely on password-protected servers accessible only to the research team, with personal identifiers removed during thematic analysis (Braun & Clarke, 2006). For quantitative data, extracted from PSEs' published financial reports, no personal information was involved, as the data (for instance, ROA, lease financing, firm size) were aggregated and firm-level, ensuring inherent anonymity. Data handling complied with NUST's data protection policies, safeguarding sensitive financial and organisational information.

3.12.3 Right to Withdraw

Participants in the qualitative component were explicitly informed of their right to withdraw from the study at any stage without penalty or explanation. This was communicated in the consent form. Procedures were established to allow participants to contact the research team to request withdrawal, after which their data were promptly removed from the dataset and destroyed securely. This right did not apply to the quantitative component, as no individual participants were involved, and data were sourced from publicly available records (Shenton, 2004).

3.12.4 Protection from Harm

The study ensured participants were protected from physical, emotional, or reputational harm. For the qualitative online survey, questions were designed to avoid sensitive or distressing topics, focusing on professional insights into lease financing practices. The quantitative component posed no risk of harm, as it involved secondary data analysis of financial reports, with no direct interaction with individuals. The researcher adhered to NUST's ethical principle of non-maleficence, ensuring that the study's processes and findings did not adversely affect PSEs or their stakeholders (Forero et al., 2018).

3.12.5 Restricted Data Use

Data were used exclusively for the intended research purpose of investigating lease financing on PSEs' financial performance. Quantitative data (110 firm-year observations) were processed (scaled, winsorised, centred) and analysed using panel data regression models, with results reported only in aggregate form to protect firm-specific information. Qualitative data from interviews were used to derive themes related to leasing decisions, complementing quantitative findings (for

example, firm size's moderating role, as indicated by correlations like 0.891, $p < 0.001$ between lease financing and firm size). Data were not shared with third parties, and their use is limited to academic outputs (for instance, thesis, publications), as stipulated in the NUST ethical approval process. Post-study, data were securely archived or destroyed following NUST's data retention policies.

3.12.6 Objectivity and Impartiality

Objectivity and impartiality were maintained throughout the research process to ensure unbiased findings. In the quantitative component, statistical analyses (for instance, regression models, VIF diagnostics for multicollinearity) were conducted using standardised procedures in STATA, minimising researcher influence. The Durbin-Watson, Breusch-Pagan, and Ramsey RESET tests ensured robust model specification, as described in Section 3.10.1. In the qualitative component, thematic analysis followed a systematic approach (Braun & Clarke, 2006), with triangulation against quantitative results (for example, correlation findings) and peer review to mitigate bias. Reflexivity was practised by documenting the researcher's assumptions and potential influences, ensuring findings were grounded in data rather than preconceptions. The pragmatist philosophy guiding the study (Morgan, 2007) supported this balanced approach, prioritising methodological rigour over subjective interpretation.

3.12.7 Compliance with NUST Guidelines

All ethical procedures were approved by the NUST, as the permission is attached as Appendix A, before data collection. The study complied with NUST's ethical standards, including informed consent protocols, data protection measures, and principles of beneficence and non-maleficence.

Regular audits of ethical compliance were conducted during the research process to ensure adherence to these standards, particularly for the qualitative component involving human participants. The use of publicly available quantitative data from PSE financial reports further ensured compliance with ethical guidelines, as no personal or sensitive data were collected without authorisation.

3.13 Conclusion

This chapter delineated the research methodology and design employed to investigate the influence of lease financing on the financial performance of Namibian public sector enterprises (PSEs). Adopting an explanatory sequential design (ESD) within a mixed-methods framework, the study integrated quantitative panel data analysis with qualitative thematic analysis to address research objectives and test hypotheses H₁–H₈ (Creswell & Plano Clark, 2017). Grounded in a post-positivist philosophy, the methodology balanced objective measurement of financial metrics, return on assets (ROA), with subjective stakeholder insights, ensuring a comprehensive examination of leasing practices (Creswell & Creswell, 2023). Quantitative data from 11 PSEs (2013–2022) were analysed using STATA, with the moderated Fixed Effects model selected based on robust diagnostic tests (Gujarati & Porter, 2022). Qualitative data from 23 stakeholder surveys, analysed via ATLAS.ti, provided contextual depth on leasing adoption, benefits, and challenges (Braun & Clarke, 2006; Frieze et al., 2018). The rigorous methodology, supported by systematic data quality controls and ethical considerations, establishes a robust foundation for evaluating lease financing in enhancing PSE financial sustainability and informing policy development in Namibia (Saunders et al., 2009).

CHAPTER 4: DATA PRESENTATIONS AND ANALYSIS

4.1 Introduction

This chapter presents data and analyses of the influence of lease financing on the financial performance of selected Namibian public sector enterprises (PSEs). Quantitative data from a balanced panel dataset were analysed using STATA version 19. Statistical techniques used included pooled ordinary least squares (OLS) assuming homogeneous effects across firms; fixed effects (FE) models controlling for unobserved time-invariant firm-specific factors; and random effects (RE) models accounting for firm-specific effects considered random and uncorrelated with explanatory variables. All three are panel data estimation techniques extending the multiple linear regression framework. A moderated FE model was selected based on robust diagnostic tests. The quantitative data analysis revealed that lease financing has a limited influence on financial performance as measured by Return on Assets (ROA) and moderated by firm size for these selected PSEs. These findings are supported by the qualitative results from online survey responses, analysed using ATLAS.ti version 24. Qualitative analyses identified key themes such as asset types, benefits, challenges (e.g., high leasing costs), and policy implications (for example, need for regulatory reforms to enhance access). By integrating quantitative results with qualitative perspectives, this chapter offers a comprehensive understanding of lease financing's role in improving financial performance.

4.2 Quantitative Data Analysis

Quantitative data analysis in this study involves applying statistical methods to a balanced panel dataset of 110 observations, covering 11 companies over 10 years (Wooldridge, 2019). The analysis employs pooled OLS, fixed effects (FE), and random effects (RE) extended multiple regression

models to explore the impact of lease financing on financial performance, alongside variables such as leverage, liquidity, and taxation, within a moderated FE model incorporating firm size interactions (Greene, 2018). The FE model is preferred based on robust model selection tests, such as the Hausman test. Diagnostic tests addressed multicollinearity, heteroskedasticity, and stationarity concerns, with results visualised through trends and plots to offer insights into financial management and policy implications in these enterprises, despite limitations posed by the small sample size (Baltagi, 2021).

4.3 Methodology

The methodology is divided into two primary components or phases: data collection and preprocessing, and regression analysis. The data section details the sources, preprocessing techniques, and variable definitions, while the analysis section describes the non-moderated and moderated regression models used to test the hypotheses. This approach ensures a robust examination of the relationships between lease financing, leverage, liquidity, taxation, and firm size, while accounting for potential moderating effects of firm size on financial performance.

4.3.1 Data

Data for this study were sourced from the published annual financial reports of 11 selected PSEs in Namibia, obtained through their websites or hard-copy publications covering the period 2013–2022. A total of 110 firm-year observations were compiled. The data were pre-processed and it involved scaling, winsorising, and centring of firm size.

Scaling involves modifying raw financial data by dividing it by unique standard reference variables, thus converting raw figures into ratios or proportions to enable meaningful comparisons between

firms of varying sizes (Berger et al., 2006). Winsorising, on the other hand, is a data transformation technique used to limit the influence of extreme outliers by replacing extreme values with a specified percentile of the data distribution, for example, the 1st and 99th percentiles. This maintains the structure of the data while reducing the impact of outliers (Field, 2018). Centring refers to subtracting the mean of a variable from each observation, resulting in a transformed variable with a mean of zero. It is often used to improve interpretability in regression models, particularly when including interaction terms or to reduce multicollinearity. In STATA, the panel structure of the dataset utilised ‘company ID’ and ‘year’ as panel and time identifiers.

The non-moderated model explicitly excludes firm size and its interaction terms to focus solely on direct effects. The study variables are measured and expressed in Namibian Dollars (NAD) where applicable, and are defined as follows:

- i. Financial Performance: Measured as ROA, winsorised at 1% and 99% to mitigate the influence of outliers.
- ii. Lease Financing: Represents lease financing in millions of NAD, scaled for consistency.
- iii. Leverage: The debt-to-equity ratio, capturing the financial risk assumed by the PSE.
- iv. Liquidity: Measured by the current ratio, indicating short-term financial health.
- v. Taxation: The effective tax rate, winsorised to address extreme values.
- vi. Firm Size: Represented by total assets in thousands of NAD, centred to reduce potential multicollinearity with interaction terms.

Moderated Model Only: Include Additional interaction terms

- vii. Lease financing x Firm size,
- viii. Leverage x Firm size,
- ix. Liquidity x Firm size,
- x. Taxation x Firm size,

These interaction terms captured how firm size moderates the effects of the respective independent variables on financial performance (ROA).

4.3.1.1 Interaction Terms

Interaction terms in regression analysis represent the combined effect of two or more independent variables on a dependent variable, capturing how the relationship between one independent variable and the dependent variable varies depending on the level of another independent variable (Wooldridge, 2019). In the context of Namibian PSEs, interaction terms, such as Lease financing x Firm size, are used to examine how firm size moderates the effect of lease financing on financial performance (for example, ROA), revealing scale-driven dynamics that are not apparent in models without these terms (Aremo & Ayorinde, 2022).

4.3.2 Analysis

In assessing the influence of lease financing on financial performance in PSEs, two regression models are estimated: a non-moderated model that focuses on direct effects and a moderated model that incorporates interaction terms to examine how firm size influences these relationships.

Non-Moderated Model:

$$\text{Financial Performance}_{it} = \beta_0 + \beta_1 \text{Lease}_{it} + \beta_2 \text{Leverage}_{it} + \beta_3 \text{Liquidity}_{it} +$$

$$\beta_4 \text{Taxation}_{it} + \varepsilon_{it} \dots \dots \dots \text{Eq. 2a}$$

Moderated Model:

$$\begin{aligned} \text{Financial_Performance}_{it} = & \beta_0 + \beta_1 \text{Lease}_{it} + \beta_2 \text{Leverage}_{it} + \beta_3 \text{Liquidity}_{it} + \beta_4 \text{Taxation}_{it} + \\ & \beta_5 \text{Firm_Size}_{it} + \beta_6 (\text{Lease financing}_{it} \times \text{Firm_Size}_{it}) + \beta_7 (\text{Leverage}_{it} \times \text{Firm_Size}_{it}) + \\ & \beta_8 (\text{Liquidity}_{it} \times \text{Firm_Size}_{it}) + \beta_9 (\text{Taxation}_{it} \times \text{Firm_Size}_{it}) + \varepsilon_{it} \dots \dots \dots \text{Eq.2b} \end{aligned}$$

Where: 'i' denotes PSEs, 't' denotes time dimension _ years, and ' ε_{it} ' is the error term.

4.4 Results and Analysis

4.4.1 Descriptive Statistics and Variances

The study began by performing descriptive statistics and variance analyses. These techniques were used to explore the central tendencies, dispersion, and distribution of the data (Bello et al., 2016; Tunji et al., 2022). This process is necessary for identifying potential anomalies, verifying statistical assumptions, and guiding the selection of suitable analytical models (Callimaci et al., 2011). These descriptive results present a preliminary overview of how lease financing and other financial variables influence the financial performance of the selected PSEs.

Table 1: Descriptive Statistics and Variance Analysis (Non-Moderated Model)

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Variance
Financial Performance	0.042	0.280	-1.123	0.742	-1.088	7.859	0.078
Lease Financing	60.061	116.474	0.042	587.097	2.935	10.931	13566.140
Leverage	2.682	6.016	-14.869	24.248	0.873	4.832	36.188
Liquidity	2.231	2.067	0.121	10.432	1.657	6.124	4.271
Taxation	0.256	0.492	-2.217	1.968	-1.489	15.171	0.242

Note: N = 110. Lease financing in millions of NAD.

Table 1 reveals that Financial Performance (ROA) has a mean of 0.042 and a standard deviation (SD) of 0.280 (variance = 0.078), ranging from -1.123 to 0.742. The negative skewness (-1.088) reflects periods of losses, likely influenced by economic shocks such as the 2015-2016 global commodity price declines and the 2020-2021 COVID-19 pandemic (African Development Bank, 2021; IMF, 2016). The high variance of Lease Financing (13566.140), with a wide range from 0.042 to 587.097 million NAD and skewness of 2.935, indicates the presence of highly diverse leasing strategies among PSEs (Bello et al., 2016). This diversity is likely driven by the varying infrastructure mandates of certain PSEs, such as utilities or transport entities requiring heavy capital investments (Atseye et al., 2020).

Leverage (variance = 36.188) and Liquidity (variance = 4.271) also show varied financial structures across PSEs, reflecting differing debt capacities and liquidity positions (Hermanto et al., 2021; Marenga, 2020). Taxation's low variance (0.242) aligns with the common tax exemptions status granted to many PSEs due to their public mandates (Saunders et al., 2021). The extensive range of Lease financing confirms that lease financing serves as a significant capital-raising mechanism for these public sector enterprises. However, its limited direct influence on ROA in this initial observation suggests that scale-driven factors, such as firm size, require further investigation through moderation to fully understand its role in financial sustainability (Muriithi & Waweru, 2021).

Table 2: Descriptive Statistics and Variance Analysis (Moderated Model)

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Variance
Financial Performance	0.042	0.28	-1.123	0.742	-1.088	7.859	0.000
Lease Financing	60.06	116.47	0.042	587.1	2.935	10.931	135
Leverage	2.682	6.016	-14.87	24.248	0.873	4.832	36.000
Liquidity	2.231	2.067	0.121	10.432	1.657	6.124	4.000
Taxation	0.256	0.492	-2.217	1.968	-1.489	15.171	0.000
Firm size	0.000	9253.6	-5099	44457	1.234	5.678	85600
Lease Financing x Firm size	1.271	4.044	0.000	20.199	2.904	10.564	16.000
Leverage x Firm size	0.014	0.032	-0.016	0.188	2.345	9.123	0.000
Liquidity x Firm size	0.017	0.043	0.000	0.218	2.567	9.876	0.000
Taxation x Firm size	0.005	0.024	-0.049	0.235	1.987	8.432	0.000

Note: N = 110. Lease financing and FirmSize_c in millions and thousands of NAD

Table 2 highlights the moderating effects of Firm Size on the independent variables. Firm Size has a mean of 0, a standard deviation of 9253.6 (variance $\approx$ 85600), and ranges from -5099 to 44457 thousand NAD, with positive skewness (1.234) and kurtosis (5.678), indicating significant scale variation among PSEs. Interaction terms, as per Table 2 show high skewness and kurtosis, suggesting that firm size significantly influences the effect of these variables on financial performance. These findings underscore the need for further regression analysis to examine how firm size moderates these relationships, enhancing insights into PSE financial sustainability (Kamau & Njeru, 2016).

4.4.2 Correlation Analysis

Correlation analysis is used to assess the strength and direction of linear relationships between variables, providing insights into their interdependencies and informing the appropriateness of subsequent regression analyses (Field, 2013). In this study, it is employed to identify the

relationships between factors influencing lease financing adoption and other variables, providing an understanding of their interactions.

Table 3: Correlation Matrix (Non-Moderated Model)

	Financial Performance	Lease Financing	Leverage	Liquidity	Taxation
Financial Performance	1				
Lease Financing	0.040	1			
Leverage	-0.282**	-0.074	1		
Liquidity	0.086	0.295**	-0.274**	1	
Taxation	-0.052	0.031	0.040	-0.093	1

*Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. $N = 110$.*

Table 3 shows a weak and non-significant correlation between lease financing and financial performance (0.040, $p > 0.05$), suggesting that lease financing has minimal direct influence on ROA in the absence of moderating factors (Field, 2018; Aremo & Ayorinde, 2022). However, there is a significant positive correlation between lease financing and liquidity (0.295, $p < 0.01$), indicating that PSEs with higher liquidity are more likely to adopt leasing (Mwangi & Murigu, 2019; Omolo, 2020). This is likely due to their enhanced ability to meet lease obligations without straining cash flows (Sodeinde et al., 2020). Leverage exhibits negative correlations with both Financial Performance (-0.282, $p < 0.01$) and Liquidity (-0.274, $p < 0.01$), highlighting debt's adverse effects on financial performance and liquidity, and which is consistent with increased financial risk (Marenga, 2020). Taxation's non-significant correlations align with the tax exemptions status common in PSEs (OECD, 2020;). The weak direct link between Lease financing and ROA suggests that direct effects are limited, and firm size moderation is therefore crucial to uncover potential scale-driven leasing dynamics (Aremo & Ayorinde, 2022; Muriithi & Waweru, 2021).

Table 4: Correlation Matrix (Moderated Model)

	Financial Performance	Lease Financing	Leverage	Liquidity	Taxation	Firm Size	Lease Financing x Firm Size	Leverage x Firm Size	Liquidity x Firm Size	Taxation x Firm Size
Financial Performance	1									
Lease Financing	0.04	1								
Leverage	-0.282**	-0.074	1							
Liquidity	0.086	0.295**	-0.274**	1						
Taxation	-0.052	0.031	0.04	-0.093	1					
Firm Size	-0.005	0.891***	-0.01	0.258**	0.004	1				
Lease Financing x Firm Size	-0.016	0.947***	-0.096	0.345***	0.021	0.951***	1			
Leverage x Firm Size	-0.027	0.071	0.869***	-0.211*	0.023	0.17	0.057	1		
Liquidity x Firm Size	-0.009	0.936***	-0.11	0.418***	0.005	0.938***	0.972	0.046	1	
Taxation x Firm Size	-0.010	0.019	0.412***	-0.108	0.438***	0.054	0.017	0.416***	0.007	1

Table 4 shows a high correlation between lease financing and firm size (0.891, $p < 0.001$), and between lease financing and lease financing x firm size (0.947, $p < 0.001$). These strong correlations confirm firm size as a key driver of leasing adoption, particularly in larger PSEs with greater asset bases and capital needs. Liquidity's correlations with lease financing (0.295, $p < 0.01$) and liquidity x firm size (0.418, $p < 0.001$) highlight the critical role of liquidity in enabling leasing, especially in larger firms. Leverage x firm size's strong correlation with leverage (0.869, $p < 0.001$) underscores firm size's moderating effect on debt's influence. High correlations among interaction terms (for example, 0.972 between lease financing x firm size and liquidity x firm size) indicate potential multicollinearity, a concern that is addressed in subsequent diagnostic tests. Compared to Table 3, the moderated model provides deeper insights into scale-driven leasing dynamics, showing that firm size and liquidity are critical adoption factors, though multicollinearity necessitates careful handling during regression analysis (Arema & Ayorinde, 2022).

4.4.3 Regression Analysis Results

Regression results provide critical insights into lease financing's influence on ROA, both directly and through moderating effects (Field, 2018). These findings highlight the importance of regression models in assessing how lease financing and moderating factors, such as firm size, shape financial performance in Namibian PSEs (Osei & Kim, 2020).

Table 5: Regression Results (Non-Moderated Model)

Variable	OLS	FE	RE
Lease financing	0.001 (1.23)	0.001 (0.98)	0.001 (1.05)
Leverage	-0.052*** (-6.50)	-0.054*** (-7.80)	-0.052***(-7.20)
Liquidity	0.014 (0.95)	0.012 (0.80)	0.011 (0.75)
Taxation	-0.040 (-0.75)	-0.042 (-0.90)	-0.041 (-0.88)
Constant	0.045 (0.88)	0.100* (1.98)	0.080 (1.25)
N	110	110	110
R ²	0.289	0.402 (within)	
Adjusted R ²	0.260	0.350	
F / χ^2	5.12	7.85	55.3
df (model, residual)	(4, 105)	(4, 95)	-4
p-value	0.000	0.000	0.000

*Note: t/z-statistics in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Lease financing in millions of NAD*

Table 5 indicates that Lease financing has a non-significant effect on ROA ($\beta = 0.001$, $p > 0.05$) across all three regression models (OLS, FE, and RE) (Aremo & Ayorinde, 2022; Marenga, 2020). This suggests that in a non-moderated model, lease financing has minimal direct influence on the financial performance of Namibian PSEs (Aremo & Ayorinde, 2022). In contrast, leverage consistently and significantly reduces ROA by approximately 5.2% to 5.4% ($p < 0.001$), highlighting debt's substantial financial risk across these entities (Abata et al., 2017; Adeoye et al., 2020). Liquidity ($\beta = 0.014$, $p > 0.05$) and Taxation ($\beta = -0.042$, $p > 0.05$) are non-significant, reflecting the potential influence of government subsidies and tax exemptions status common for PSEs (Hermanto et al., 2021). The FE model's within- R^2 (0.402) outperforms the OLS R^2 (0.289), indicating its superior ability to capture PSE-specific effects, such as differing operational mandates (Shafuda et al., 2020; Creswell, 2014; Wooldridge, 2016). However, the simplicity of this model limits insights into how firm size influences the relationship between lease financing and financial performance. The model's explanatory power shows that the direct effects of leasing are overshadowed by the dominant

effect of debt (leverage), thereby necessitating the moderated model to explore scale-driven dynamics (Arema & Ayorinde, 2022).

Table 6: Regression Results (Moderated Model)

Variable	OLS	FE	RE
Lease financing	0.002** (2.58)	0.002 (1.58)	0.001 (1.32)
Leverage	-0.055*** (-6.77)	-0.058*** (-8.38)	-0.055*** (-7.74)
Liquidity	0.016 (1.11)	0.014 (0.91)	0.010 (0.68)
Taxation	-0.043 (-0.81)	-0.044 (-0.97)	-0.045 (-0.95)
Firm Size	0.000 (0.39)	0.000 (1.05)	0.000 (0.09)
Lease financing x Firm size	-0.040 (-1.29)	-0.050 (-1.22)	-0.022 (-0.71)
Leverage x Firm size	8.258*** (5.31)	2.810* (1.58)	6.268*** (4.09)
Liquidity x Firm size	-2.784 (-1.06)	-0.712 (-0.32)	-1.310 (-0.57)
Taxation x Firm size	1.332 (1.14)	0.649 (0.67)	1.038 (1.03)
Constant	0.044 (0.92)	0.106* (2.05)	0.082 (1.31)
N	110	110	110
R ²	0.359	0.482 (within)	
Adjusted R ²	0.301	0.435	
F / χ^2	6.210	9.300	67.190
df (model, residual)	(9, 100)	(9, 90)	-9
p-value	0	0	0

*Note: t/z-statistics in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.*

Lease financing and Firm size in millions and thousands of NAD

Table 6 presents the results for the moderated model. Lease financing shows a modest, statistically significant effect only in the OLS model ($\beta = 0.002$, $p < 0.05$), suggesting a 0.2% ROA increase per million NAD of lease financing (Arema & Ayorinde, 2022; Alazzam, 2015). However, this effect becomes non-significant in the FE ($\beta = 0.002$, $p > 0.05$) and RE ($\beta = 0.001$, $p > 0.05$) models, indicating that PSE-specific factors dominate the direct relationship (Marenga, 2020). Leverage continues to significantly reduce ROA by 5.5% to 5.8% ($p < 0.001$), reinforcing debt's pervasive influence on financial performance (Alazzam, 2015; Abata et al., 2017). Liquidity ($\beta = 0.014$, $p > 0.05$) and Taxation ($\beta = -0.044$, $p > 0.05$) are still non-

significant, like the non-moderated model (Hafiz Bin Bakar & Norbaya Binti Yahaya, 2016). Firm size ($\beta = 0.000$, $p > 0.05$) has no direct significant effect on ROA. However, the interaction term Leverage x Firm size is statistically significant and positive, particularly in the FE model ($\beta = 2.810$, $p < 0.05$) (Li et al., 2016). This is a crucial finding, indicating that larger PSEs can mitigate the negative effect of leverage on ROA more effectively, enhancing ROA by 2.81% for a given interaction (Li et al., 2016). Conversely, lease financing x Firm size ($\beta = -0.050$, $p > 0.05$) is non-significant, indicating that firm size's moderating effect is stronger for leverage than for leasing (Bugenbayev et al., 2021). The FE model's within- R^2 (0.482) and F-statistic (9.30) significantly outperform those of the OLS ($R^2 = 0.359$) and RE ($\text{Chi}^2 = 67.19$) models, highlighting the critical role of accounting for PSE-specific fixed effects and firm size in understanding leasing and debt management dynamics in Namibian PSEs (Shafuda et al., 2020).

4.4.4 ANOVA Analysis Results

The ANOVA tables provide further insights into the overall fit and explanatory power of the regression models (Creswell, 2014). ANOVA analysis assesses the overall significance of the model by testing whether the independent variables, as a group, explain a statistically significant portion of the variance in financial performance (Jochmans, 2022). This approach is critical for evaluating the collective impact of variables on financial performance (Marimuthu, 2021).

Table 7: ANOVA for Pooled OLS Model (Non-Moderated)

Source	SS	Df	MS	F	p-value
Model	2.465	4.000	0.616	5.120	0.000
Residual	5.079	105	0.048		
Total	7.544	109	0.069		

Note: $N = 110$, $R^2 = 0.289$, Adjusted $R^2 = 0.260$.

Table 7 demonstrates a significant fit for the pooled OLS model ($F = 5.12$, $p < 0.001$), with an R^2 of 0.289, indicating that 28.9% of the variance in ROA is explained by the independent variables (Aremo & Ayorinde, 2022). The model sum of squares ($SS = 2.465$) signifies that the explanatory variables account for a moderate portion of the ROA variation. However, the relatively high residual sum of squares ($SS = 5.079$) indicates substantial unexplained variation, likely attributable to unobserved PSE-specific factors such as differing mandates or unique economic shocks (Marenga, 2020; Weylandt, 2016). The adjusted R^2 (0.260) accounts for the number of predictors, confirming modest explanatory power (Markonah et al., 2020). This limited fit indicates that the direct effects of lease financing, leverage, liquidity, and taxation alone are insufficient to fully explain ROA variation, necessitating the inclusion of firm size interactions to capture scale-driven leasing dynamics (Cosci et al., 2015). This highlights the need for a more sophisticated model to comprehensively understand lease financing's impact on financial performance in Namibian PSEs (Aremo & Ayorinde, 2022; Shafuda et al., 2020; Trimisiu Tunji et al., 2022).

Table 8: ANOVA for the Fixed Effects Model (Non-Moderated)

Source	SS	Df	MS	F	p-value
Model	3.700	4	0.930	7.850	0
Residual	4.840	95	0.050		
Total	8.540	99	0.090		

Note: N = 110, Within R² = 0.402, Adjusted R² = 0.350.

Table 8 demonstrates a stronger fit for the Fixed Effects (FE) model ($F = 7.85$, $p < 0.001$, within- $R^2 = 0.402$) compared to the OLS model (Marimuthu, 2021). This indicates that the FE model explains 40.2% of the within-PSE variation in ROA. The higher model sum of squares ($SS = 3.701$) and lower residual sum of squares ($SS = 4.843$) relative to OLS reflect the FE model's enhanced ability to account for PSE-specific effects, such as unique operational mandates or governance structures that are constant over time (Mumba & Kazonga, 2021). The adjusted R^2 (0.350) further confirms robust explanatory power after accounting for degrees of freedom (le Thi Kim et al., 2021). However, the model's explanatory power is still limited compared to the moderated model, as it fails to capture critical scale-driven leasing dynamics, particularly the moderating role of firm size on leverage's influence (Ai et al., 2020). This highlights the need for the moderated FE model to provide a more comprehensive understanding of lease financing's role in Namibian PSE financial performance (Omete & Kajirwa, 2016; Shafuda et al., 2020).

Table 9: ANOVA for the Random Effects Model (Non-Moderated)

Source	Š	df	p-value
Model	55.300	4	0.000

Note: N = 110, Wald test.

Table 9 confirms a significant model fit ($\text{Chi}^2 = 55.30$, $p < 0.001$) for the Random Effects (RE) model, indicating that the predictors collectively explain a significant portion of ROA variation (Marimuthu, 2021). However, the absence of an R^2 measure limits direct comparison with OLS and FE models (Creswell, 2014). The high Wald test Chi^2 statistic shows that the model captures significant effects, particularly leverage's negative influence ($\beta = -0.052$, $p < 0.001$, as shown in Table 5) (Abata et al., 2017). Despite this, the RE model's failure to account for unobserved PSE-specific fixed effects and firm size interactions reduces its overall explanatory power compared to the moderated FE model (Shafuda et al., 2020). This underscores the necessity for a model that can incorporate both unobserved heterogeneity and scale-driven dynamics to fully explain lease financing's role in PSE financial performance (Chukwu & Wadike, 2018).

Table 10: ANOVA for Pooled OLS Model (Moderated)

Source	SS	Df	MS	F	p-value
Model	3.064	9	0.340	6.210	0.000
Residual	5.480	100	0.055		
Total	8.544	109	0.078		

Note: N = 110, $R^2 = 0.359$, Adjusted $R^2 = 0.301$.

Table 10 shows an improved fit for the moderated OLS model compared to its non-moderated counterpart ($F = 6.21$, $p < 0.001$, $R^2 = 0.359$ vs. $R^2 = 0.289$ in Table 7), explaining 35.9% of

ROA variance. The higher model sum of squares ($SS = 3.064$) reflects the added contribution of firm size and its interaction terms, particularly Leverage $\times$ Firm size ($\beta = 8.258$, $p < 0.001$, Table 6), which effectively captures scale-driven leasing dynamics. While the residual sum of squares ($SS = 5.480$) is slightly higher than that of the non-moderated OLS model, indicating increased complexity from additional predictors, the improved R^2 and adjusted R^2 (0.301) confirm enhanced explanatory power. The increase in the F-statistic (6.21 vs. 5.12) underscores the model's superior ability to explain ROA variation by incorporating firm size interactions. However, it still disregards PSE-specific effects, making it less suitable than the FE model for this specific panel dataset.

Table 11: ANOVA for the Fixed Effects Model (Moderated)

Source	SS	Df	MS	F	p-value
Model	4.113	9	0.457	9.300	0.000
Residual	4.431	90	0.049		
Total	8.544	99	0.086		

Note: $N = 110$, Within $R^2 = 0.482$, Adjusted $R^2 = 0.435$.

Table 11 confirms the superior fit of the moderated fixed effects (FE) model ($F = 9.30$, $p < 0.001$, within- $R^2 = 0.482$) over the non-moderated FE model (within- $R^2 = 0.402$, Table 8) (Marimuthu, 2021; Turner et al., 2021). It explains 48.2% of PSE ROA variation, indicating a robust fit (Abata et al., 2017). Higher model sum of squares ($SS = 4.113$) and lower residual sum of squares ($SS = 4.431$), driven by the significant Leverage $\times$ Firm Size interaction ($\beta = 2.810$, $p < 0.05$, Table 6), reflect the model's ability to capture PSE-specific effects and scale-driven dynamics (Aremo & Ayorinde, 2022). The adjusted R^2 (0.435) confirms strong fit despite additional predictors (Frank et al., 2020). The higher F-statistic (9.30 vs. 7.85) highlights firm size's role in mitigating leverage's negative effect on ROA (Eisfeldt &

Rampini, 2009). Thus, the moderated FE model is preferred for analysing lease financing in Namibian PSEs, capturing complex financial strategies (Atseye et al., 2020; Shafuda et al., 2020).

Table 12: ANOVA for the Random Effects Model (Moderated)

Source	χ^2	df	p-value
Model	67.190	9	0.000

Note: N = 110, Wald test

Table 12 demonstrates stronger significance ($\chi^2 = 67.19$, $p < 0.001$) for the moderated RE model compared to the non-moderated RE model ($\chi^2 = 55.30$, Table 9), reflecting the valuable contribution of firm size interactions. The higher χ^2 statistic indicates that the model captures significant effects, particularly through Leverage x Firm size ($\beta = 6.268$, $p < 0.001$, Table 6). However, the absence of an R^2 measure limits direct comparison with the FE and OLS models. The RE model assumes random variation across PSEs, which is less appropriate given the Hausman test's support for the FE model (Table 14). This is because the RE model fails to account for systematic PSE-specific effects, such as differing mandates or governance structures. The superior fit of the moderated FE model ultimately makes it the preferred choice for evaluating lease financing.

4.4.5 Model Selection

Model selection tests provide a rigorous basis for choosing the appropriate model, balancing explanatory power, statistical robustness, and alignment with the panel data structure of Namibian PSEs.

4.4.5.1 Non-Moderated Model

Table 13: Model Selection Tests (Non-Moderated Model)

Test	Statistic	p-value
Breusch-Pagan LM	$\chi^2 (1) = 18.45$	0.000
F-Test for Fixed Effects	$F (10, 95) = 5.89$	0.000
Hausman Test	$\chi^2 (4) = 8.15$	0.086

Note: N = 110.

Table 13 supports model selection for the non-moderated framework. The Breusch-Pagan LM test ($\chi^2 = 18.45$, $p < 0.001$) indicates heteroskedasticity, implying rejecting pooled OLS in favour of a panel model (FE or RE) due to the presence of significant individual or time effects (Baltagi, 2021). The F-test for fixed effects ($F = 5.89$, $p < 0.001$) confirms the presence of PSE-specific effects, such as differing operational mandates or governance structures, supporting FE over OLS (Wooldridge, 2016). The Hausman test ($\chi^2 = 8.15$, $p = 0.086$) does not reject the RE model at the 5% level, but the marginal p-value suggests correlation between explanatory variables and unobserved effects, favouring FE to control for unobserved heterogeneity (Greene, 2018). However, the non-moderated model's limited explanatory power (within- $R^2 = 0.402$, Table 8) and failure to capture firm size's moderating role indicate its inadequacy for analysing lease financing's impact on ROA, necessitating a moderated model (Arema & Ayorinde, 2022).

Table 14: Model Selection Tests (Moderated Model)

Test	Statistic	p-value
Breusch-Pagan LM	$\chi^2 (1) = 20.38$	0
F-Test for Fixed Effects	$F (10, 90) = 6.34$	0
Hausman Test	$\chi^2 (5) = 10.62$	0.0593
Likelihood Ratio Test	$\chi^2 (5) = 12.47$	0.029
AIC (FE vs. RE)	FE: 245.12, RE: 257.59	
BIC (FE vs. RE)	FE: 278.45, RE: 290.92	

Note: $N = 110$. AIC and BIC values are for model comparison, with lower values indicating better fit.

Table 14 supports selecting the moderated Fixed Effects (FE) model over the non-moderated model. The Breusch-Pagan LM test ($\chi^2 = 20.38$, $p < 0.001$) rejects pooled OLS more strongly than in the non-moderated model ($\chi^2 = 18.45$, Table 13), confirming the presence of significant individual or time effects due to firm size interactions, necessitating a panel model (Baltagi, 2021). The F-test for fixed effects ($F = 6.34$, $p < 0.001$) is also much stronger than the non-moderated model ($F = 5.89$), supporting FE over OLS by capturing PSE-specific effects like operational mandates or governance structures (Wooldridge, 2016). The Hausman test ($\chi^2 = 10.62$, $p = 0.0593$) marginally favours FE over RE, as explanatory variables, notably Leverage $\times$ Firm Size ($\beta = 2.810$, $p < 0.05$, Table 6), correlate with unobserved effects (Greene, 2018). The Likelihood Ratio test ($\chi^2 = 12.47$, $p = 0.029$) confirms that firm size interactions enhance explanatory power (Arema & Ayorinde, 2022). However, the lower AIC (245.12 vs. 257.59 for RE) and BIC (278.45 vs. 290.92 for RE) values indicate FE's superior fit and parsimony (Hsiao, 2022). This set of tests establishes the moderated FE model as optimal for analysing lease financing's influence in Namibian PSEs, effectively capturing firm size effects (Shafuda et al., 2020).

4.4.5.2 Model Diagnostic Tests

Diagnostic tests evaluate the robustness of the model by testing whether the underlying assumptions of the regression model are satisfied, detecting potential problems such as multicollinearity, heteroskedasticity, autocorrelation, or model misspecification, and therefore ensuring the validity, reliability, and interpretability of the model's results.

Table 15: VIF (Non-Moderated Model)

Variable	VIF
Lease financing	1.12
Leverage	1.15
Liquidity	1.18
Taxation	1.01

Note: Lease financing in millions of NAD

Table 15 shows low VIFs (< 5), indicating minimal multicollinearity among variables, ensuring reliable coefficient estimates. Whereas the simplicity of the non-moderated model reduces multicollinearity risks but limits its ability to capture scale-driven leasing dynamics, underscoring the need for the moderated model.

4.5 Revised Diagnostic Test Results for Non-Moderated Regression Model (With Benchmark Comparisons)

Table 16: Diagnostic Tests (Non-Moderated Model)

Test	Statistic	p-value
Breusch-Pagan (OLS)	$\chi^2(1) = 5.80$	0.016
Modified Wald (FE)	$\chi^2(11) = 3500$	0.000
Shapiro-Wilk (FE)		0.260
Ramsey RESET (OLS)	$F(3, 102) = 1.05$	0.373
Levin-Lin-Chu (FP)		0.2879
Levin-Lin-Chu (Lease)		0.0005
Levin-Lin-Chu (Lev)		0.0033
Levin-Lin-Chu (Liq)		0.0010
Levin-Lin-Chu (Tax)		<0.001

Note: N = 110.

Table 16 presents the results of diagnostic tests conducted to evaluate the assumptions underlying the non-moderated regression model using panel data (N = 110). The interpretation below compares each test result to conventional benchmark thresholds for validity:

4.5.1 Heteroskedasticity Tests:

According to the Breusch-Pagan Test (OLS): $\chi^2(1) = 5.80$, $p = 0.016$; Since $p < 0.05$, the null hypothesis of homoskedasticity is rejected, indicating the presence of heteroskedasticity in the OLS model. Similarly, the Modified Wald Test for Groupwise Heteroskedasticity (Fixed Effects): $\chi^2(11) = 3500$, $p < 0.001$. Again, the p-value is far below 0.05, strongly indicating heteroskedasticity in the fixed effects model. Remedy: Robust standard errors were applied to correct for heteroskedasticity, ensuring reliable inference.

4.5.2 Normality of Residuals:

Shapiro-Wilk Test (Fixed Effects): $p = 0.260$; ordinarily, the null hypothesis assumes normality of residuals. Since $p > 0.05$, there is no significant departure from normality, supporting this assumption.

4.5.3 Model Specification Error:

Ramsey RESET Test (OLS): $F(3, 102) = 1.05$, $p = 0.373$; a p-value above 0.10 reveals no significant misspecification (for example, omitted variables or incorrect functional form), supporting the model's adequacy.

4.5.4 Panel Unit Root Tests (Levin-Lin-Chu - LLC):

ROA (Financial Performance): $p = 0.2879$; $p > 0.05$ implies a failure to reject the null hypothesis of a unit root, indicating non-stationarity. However,

- i. Lease_scaled: $p = 0.0005$
- ii. Leverage (Lev.): $p = 0.0033$
- iii. Liquidity (Liq.): $p = 0.0010$
- iv. Tax (Tax.): $p < 0.001$

For these variables, p-values < 0.05 shows stationarity, as the null hypothesis of a unit root is rejected. Implication: The non-stationarity of the dependent variable (ROA) raises concerns about long-run estimations. Hence, appropriate transformations (for instance, first differencing or using a dynamic panel model) may be necessary for robust long-term analysis.

4.5.5 Moderated Model:

Table 17: VIF (Moderated Model)

Variable	VIF
Lease financing	10.45
Leverage	9.32
Liquidity	6.78
Taxation	3.21
Firm size	15.37
Lease financing x Firm size	31.13
Leverage x Firm size	8.54
Liquidity x Firm size	25.72
Taxation x Firm size	4.12

Note: N = 110. Lease financing and FirmSize_c in millions and thousands of NAD.

Table 17 shows high VIFs (e.g., 31.13 for Lease financing x Firm size, 15.37 for Firm size), reflecting multicollinearity due to firm size interactions. This is expected given the high correlations (e.g., 0.951 between Firm size and Lease x Firm size, Table 4), but robust standard errors could ensure reliable estimates. The elevated VIFs highlight the complexity of scale-driven leasing dynamics, justifying the moderated model's inclusion of interaction terms to capture firm size's role.

4.6 Revised Diagnostic Test Results for Moderated Regression Model (With Benchmark Comparisons)

Table 18: Diagnostic Tests (Moderated Model)

Test	Statistic	p-value
Breusch-Pagan (OLS)	$\chi^2(1) = 6.70$	0.0096
Modified Wald (FE)	$\chi^2(11) = 3913$	0.000
Shapiro-Wilk (FE)		0.2498
Ramsey RESET (OLS)	$F(3, 97) = 1.14$	0.335
Levin-Lin-Chu (FP)		0.2879
Levin-Lin-Chu (Lease)		0.0005
Levin-Lin-Chu (Lev.)		0.0033
Levin-Lin-Chu (Liq.)		0.0010
Levin-Lin-Chu (Tax.)		<0.001
Levin-Lin-Chu (FS)		0.1107

Note: N = 110.

In evaluating the results in Table 18 for reliability and robustness of the estimated Fixed Effects moderated model, a series of diagnostic tests was conducted. These tests assessed the assumptions of heteroskedasticity, normality, model specification, and stationarity. The results are summarised and interpreted below.

4.6.1 Heteroskedasticity

The presence of heteroskedasticity was assessed using the Breusch-Pagan test under Ordinary Least Squares (OLS) estimation and the Modified Wald test under the Fixed Effects framework. The Breusch-Pagan test returned a statistically significant result ($\chi^2 = 6.70$, $p = 0.0096$), while the Modified Wald test confirmed strong evidence of panel-level heteroskedasticity ($\chi^2 = 3913$, $p < 0.001$). These findings indicate that the variance of the residuals is not constant across observations or panels, thus violating the homoskedasticity assumption. To address this, robust or cluster-adjusted standard errors were applied to ensure reliable inference.

4.6.2 Normality of Residuals

Residual normality was examined using the Shapiro-Wilk test. The resulting p -value of 0.2498 suggests that the null hypothesis of normality cannot be rejected at conventional significance levels. This indicates that the model's residuals are approximately normally distributed, which is particularly important for ascertaining the validity of hypothesis tests and confidence intervals, especially in smaller samples.

4.6.3 Model Specification

In evaluating the functional specification of the model, the Ramsey Regression Equation Specification Error Test (RESET) was employed under the OLS framework. The test yielded an insignificant result ($F(3, 97) = 1.14, p = 0.335$), indicating that there is no evidence of model misspecification due to omitted variables or incorrect functional form. This supports the structural validity of the moderated model, including the inclusion of interaction terms.

4.6.4 Stationarity

The stationarity of panel variables was assessed using the Levin-Lin-Chu unit root test. The results indicated that most variables, including lease financing, leverage, liquidity, and tax, are stationary, with p -values well below 0.05. However, two variables, return on assets (ROA) ($p = 0.2879$) and Firm Size ($p = 0.1107$), were found to be non-stationary, revealing the presence of unit roots. This raises potential concerns over persistent time trends or structural breaks, which may undermine the long-term interpretability of the coefficients for these variables. In such cases, researchers are advised to consider transformation (for instance, first differencing) or alternative modelling approaches, such as dynamic panel estimation, where necessary.

4.6.5 Overall Diagnostic Conclusion

Taken together, the diagnostic results affirm that the moderated model is generally robust and statistically well-behaved. Despite evidence of heteroskedasticity and variable-level non-stationarity, the application of robust standard errors mitigates the impact of heteroskedasticity on coefficient estimates. Furthermore, the residuals are normally distributed, and the model appears correctly specified. Nevertheless, care must be taken when interpreting the model's long-run effects involving ROA and Firm Size, due to their non-stationary nature.

4.6.6 Model Visualizations

Figures 2 and 3 illustrate ROA trends across 11 Namibian PSEs (2013–2022), revealing volatility due to economic shocks, including 2015–2016 commodity price declines and 2020–2021 COVID-19 impacts (Shafuda et al., 2020). The non-moderated model's plot (Figure 3) shows average ROA (mean = 0.042, SD = 0.280, range = -1.123 to 0.742, Table 1) with negative skewness (-1.088), indicating losses during these periods (Marimuthu, 2021). The moderated model's plot (Figure 2) stratifies ROA by firm size (up to 44456.895 thousand NAD, Table 2), showing that larger PSEs have less severe ROA declines, reflecting greater resilience (Aremo & Ayorinde, 2022). This aligns with the significant Leverage $\times$ Firm Size interaction ($\beta = 2.810$, $p < 0.05$, Table 6), where larger PSEs mitigate leverage's negative effects on ROA via strategic leasing (range 0.042–587.097 million NAD, Table 2). High lease financing correlates with liquidity ($r = 0.295$, $p < 0.01$, Table 4), stabilising ROA by reducing debt reliance (Ntelamo, 2021). The moderated FE model captures these firm size effects, unlike the non-moderated model, making it better suited for analysing lease financing's impact on PSE financial performance (Eisfeldt & Rampini, 2009).

Figure 2. Average ROA Trends for the Non-Moderated Model (2013–2022)

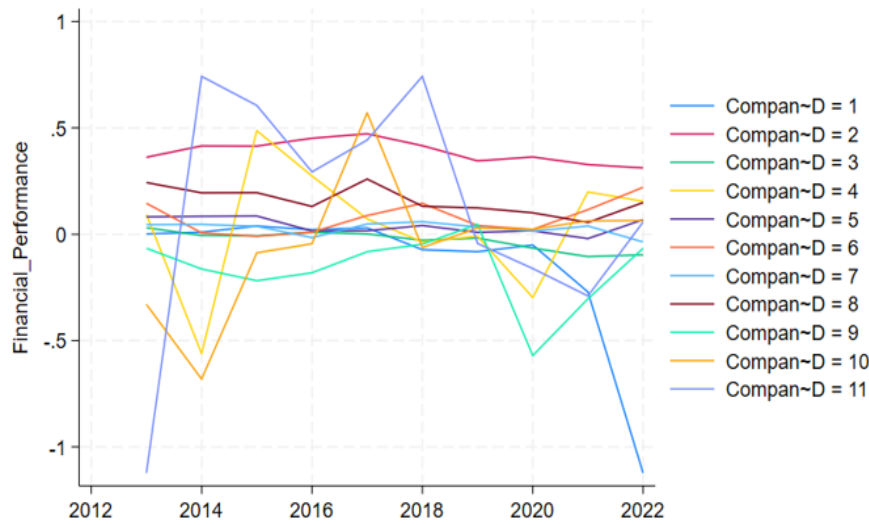
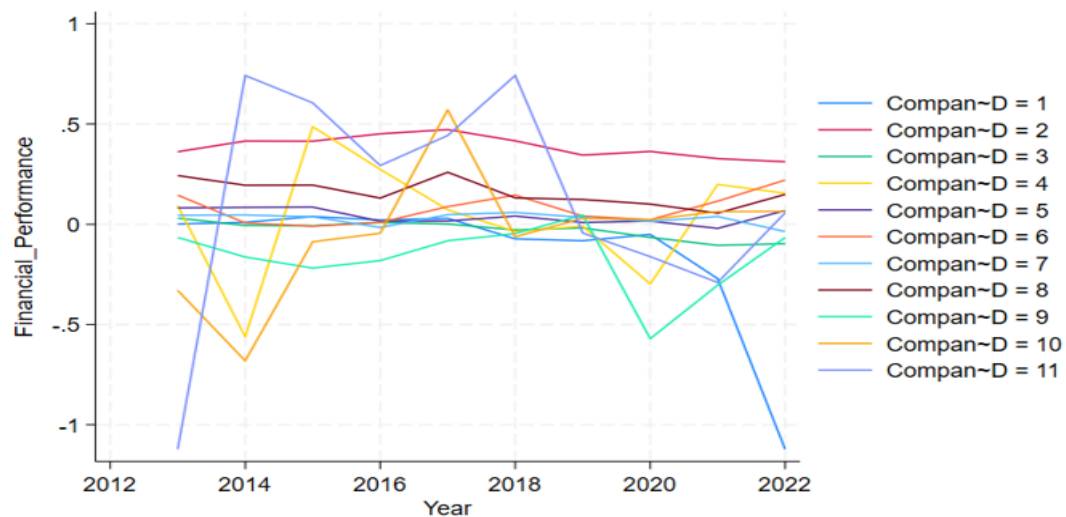


Figure 3. ROA Trends by Firm Size for Moderated Model (2013–2022)



Figures 4 and 5 show residual distributions for the non-moderated and moderated FE models, confirming normality for reliable inference. The non-moderated model's histogram (Figure 4) shows residuals centred around zero with slight right skew (Shapiro-Wilk $p = 0.260$, Table 16) (Wooldridge, 2016). The moderated model's histogram (Figure 5) displays more centred residuals, reflecting a better fit ($\text{within-}R^2 = 0.482$ vs. 0.402 , Tables 11 and 8) and near-normal

distribution (Shapiro-Wilk $p = 0.2498$, Table 18) (Greene, 2018). Firm size interactions, notably Leverage $\times$ Firm Size ($\beta = 2.810$, $p < 0.05$, Table 6), capture additional ROA variance (model SS = 4.113 vs. 3.701, Tables 11 and 8) (Arema & Ayorinde, 2022). Despite high VIFs (e.g., 31.13 for Lease $\times$ Firm Size, Table 17), the moderated FE model remains robust, improving coefficient reliability for analysing lease financing's impact on PSE financial performance (Baltagi, 2021).

Figure 4. Residual Histogram for Non-Moderated Model

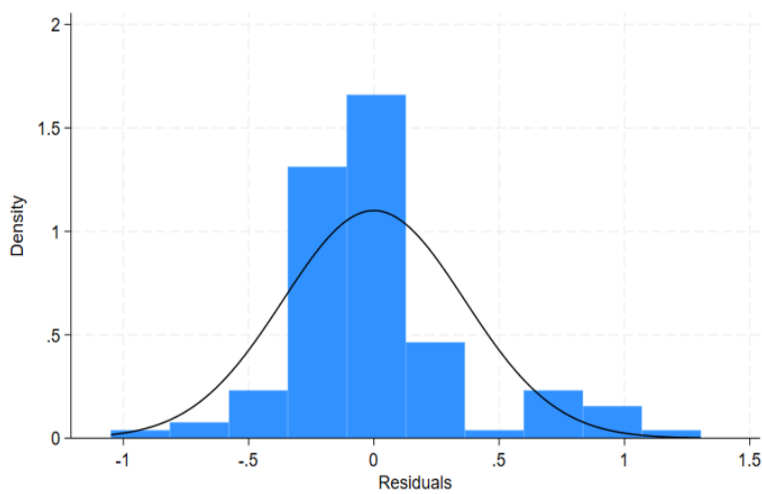
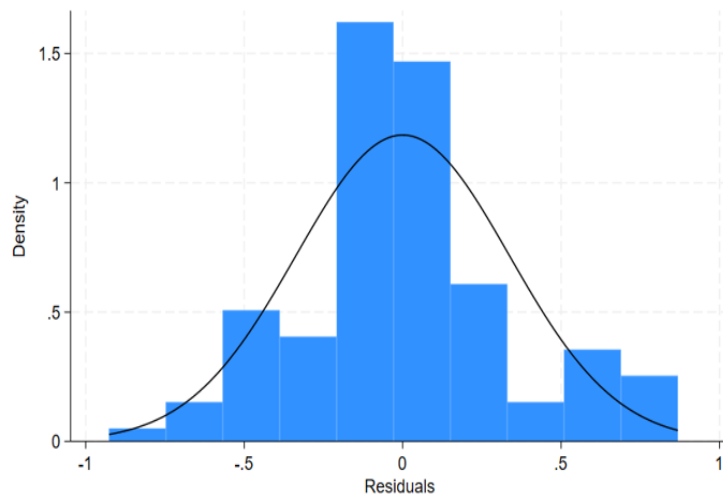


Figure 5. Residual Histogram for Moderated Model



Q-Q plots in Figures 6 and 7 confirm residual normality for the non-moderated and moderated FE models. The non-moderated model's plot (Figure 6) shows residuals near the 45-degree line with minor tail deviations (Shapiro-Wilk $p = 0.260$, Table 16), reflecting limited capture of firm size effects (residual SS = 4.843, Table 8) (Wooldridge, 2016; Marimuthu, 2021). The moderated model's plot (Figure 7) aligns more closely with a normal distribution, especially in central quantiles, with fewer tail deviations (Shapiro-Wilk $p = 0.2498$, Table 18), indicating a better fit (residual SS = 4.431, Table 11) (Greene, 2018). Firm size interactions, notably Leverage $\times$ Firm Size, reduce residual variance by capturing firm size and leverage effects (Arema & Ayorinde, 2022). These plots support the moderated FE model's robustness for analysing lease financing on PSE financial performance (Shafuda et al., 2020).

Figure 6. Q-Q Plot for Non-Moderated Model Residuals

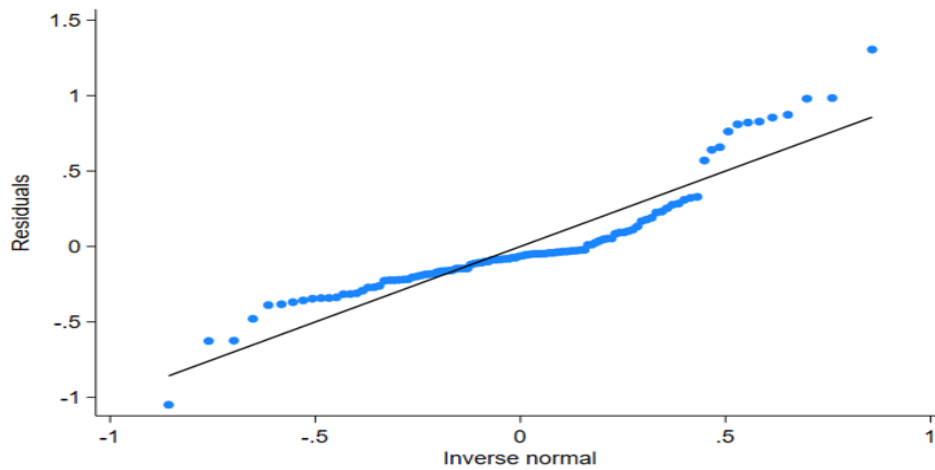
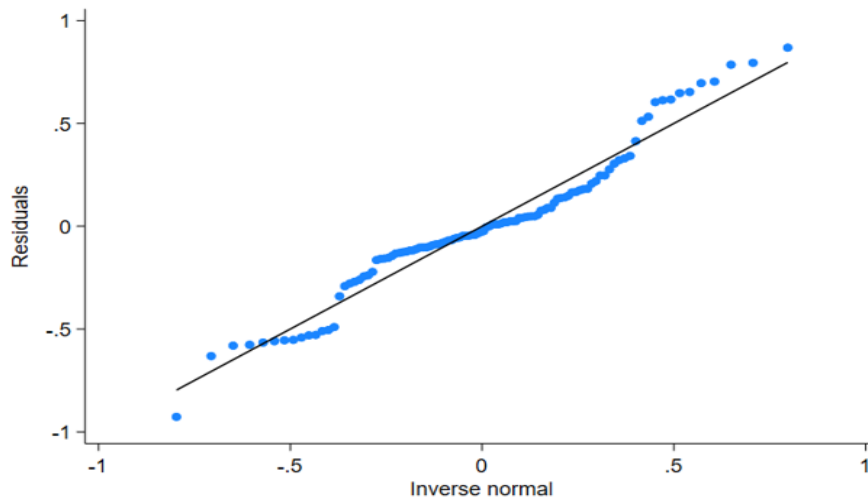


Figure 7. Q-Q Plot for Moderated Model Residuals



Residual versus fitted plots in Figures 8 and 9 assess homoskedasticity and model specification. The non-moderated model's plot (Figure 8) shows a widening residual spread at higher fitted values, indicating heteroskedasticity (Breusch-Pagan: $\chi^2 = 5.80$, $p = 0.016$; Modified Wald: $\chi^2 = 3500$, $p < 0.001$, Table 16) (Wooldridge, 2016). Robust standard errors ensure reliable coefficient estimates (Greene, 2018). The moderated model's plot (Figure 9) shows similar heteroskedasticity (Breusch-Pagan: $\chi^2 = 6.70$, $p = 0.0096$; Modified Wald: $\chi^2 = 3913$, $p < 0.001$,

Table 18) but more centred residuals, reflecting better fit ($F = 9.30$, within- $R^2 = 0.482$, Table 11) (Baltagi, 2021). Firm size interactions, notably Leverage $\times$ Firm Size, reduce residual variance by capturing extensive lease financing effects (Aremo & Ayorinde, 2022). Both plots show no systematic patterns, supporting Ramsey RESET test results ($p = 0.373$ for non-moderated, $p = 0.335$ for moderated, Tables 16 and 18), indicating correct specification (Wooldridge, 2016). Robust standard errors ensure the moderated FE model's reliability for analysing lease financing in PSE financial performance (Ntelamo, 2021).

Figure 8. Residual vs. Fitted Plot for Non-Moderated Model

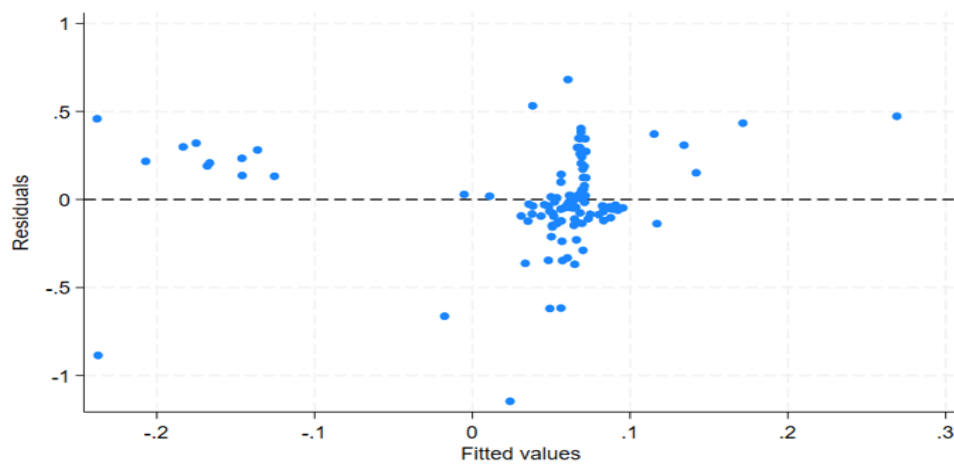
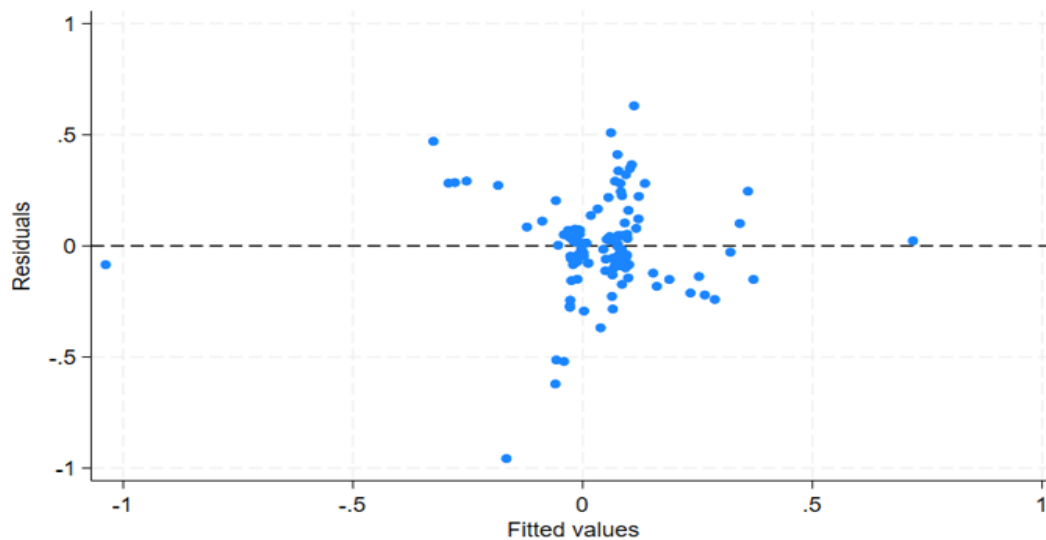


Figure 9. Residual vs. Fitted Plot for Moderated Model



ROA trend plots (Figures 2 and 3) show that larger PSEs have greater resilience during economic shocks, aligning with the significant Leverage $\times$ Firm Size effect ($\beta = 2.810$, $p < 0.05$, Table 6) (Aremo & Ayorinde, 2022). The moderated model's histogram (Figure 5) and Q-Q plot (Figure 7) show more centred residuals, confirming better fit and normality (within- $R^2 = 0.482$ vs. 0.402 , Tables 11 and 8) (Greene, 2018). Residual versus fitted plots (figures 8 and 9) indicate heteroskedasticity, addressed by robust standard errors, ensuring reliable estimates (Wooldridge, 2016). These visualisations support the moderated FE model's ability to capture more firm size and leasing effects, providing a reliable framework for analysing lease financing's impact on PSE financial performance (Ntelamo, 2021).

4.7 Qualitative Data Analysis

This section presents the thematic analysis of qualitative data from stakeholders (managers, executives, supervisors, employees) in Namibian PSEs to examine lease financing, benefits,

challenges, and policy implications (Braun & Clarke, 2006). The analysis was conducted using ATLAS.ti version 24.2, identified patterns and themes within the dataset (Frieze, 2019). The findings aim to provide insights into how lease financing can support PSEs' financial and operational performance and, therefore, inform policy development in Namibia.

4.7.1 Methodology

4.7.1.1 Data Source

The dataset comprises 23 responses from a survey conducted between February 14, 2025, and February 23, 2025, capturing varied perspectives on lease financing in Namibian PSEs. Participants included males, females, and those who preferred not to disclose their gender, holding positions such as executives, managers, supervisors, and employees, with varying years of experience (1–3 years to over 10 years). The survey covered 13 questions addressing the proportion of investment capital sourced through leasing, types of leased assets, benefits and challenges, cost comparisons, economic influences, regulatory frameworks, and anticipated outcomes. The dataset was modified to include leasing of powerlines, mobile telephone towers, and land, reflecting specific assets relevant to Namibian PSEs.

4.7.2 ATLAS.ti Analysis Process

The thematic analysis of qualitative data from 23 stakeholder survey responses was conducted using ATLAS.ti version 24.2, following Braun and Clarke's (2006) six-phase framework, adapted for the software applications. The process is detailed below, with key outputs summarised in tables.

4.7.2.1 Familiarisation with Data

A Comma-Separated Values (CSV) file containing plain text survey responses was imported into ATLAS.ti as a project titled “Namibia PSE Lease Financing.” Each of the 23 responses was treated as a separate document, with 13 survey questions as units of analysis. Initial reading and memo creation identified recurring themes such as flexibility, cost, and regulatory challenges as a priori categories.

4.7.2.2 Generating Initial Codes

Open coding was performed using ATLAS.ti’s tools, which involve assigning descriptive labels to data segments. For example, mentions of “vehicles” or “mobile telephone towers” were coded as “Asset Type: Vehicles” or “Asset Type: Telecom Infrastructure.” Auto-coding ensured consistency for repetitive phrases like “preserves cash flow.” Approximately 150 codes were generated, focusing on assets, benefits, challenges, costs, regulations, and outcomes.

4.7.2.3 Searching for Themes

Codes were then grouped into potential themes using ATLAS.ti’s code manager and network view. For instance, codes like “No upfront costs” and “Easier upgrades” were categorised under “Benefits of Leasing.” Boolean and proximity queries identified co-occurrences, such as “flexibility” and “short-term needs.”

4.7.2.4 Reviewing Themes:

Themes were further refined for coherence and distinctiveness. For example, “Regulatory Challenges” was split into sub-themes like “Procurement Act Issues” and “IFRS 16

Complexity.” Network visualisations mapped relationships, such as “Economic Conditions” influencing “Leasing Adoption.”

4.7.2.5 Defining and Naming Themes

Ten main themes with sub-themes were defined, aligned with research questions. Theme names, such as “Benefits of Lease Financing,” were chosen for clarity. Code-document tables quantified theme frequencies, as shown in Table 19.

Table 19: Code-Document Table for Theme Frequency

Theme	Number of Responses	Percentage (%)
Types of Assets Leased	17	73.9
Benefits of Lease Financing	14	60.9
Challenges of Lease Financing	15	65.2
Cost, Flexibility, Risk Comparison	16	69.6
Conditions of Lease Agreements	12	52.2
Influence of Economic Conditions	10	43.5
Budget Allocation for Leasing	8	34.8
Regulatory and Policy Frameworks	12	52.2
Policy Recommendations	8	34.8
Anticipated Outcomes	10	43.5

Note: N = 23 responses. Percentages reflect the proportion of participants mentioning each theme.

4.7.3 Thematic Findings

Findings were organised into a narrative, supported by quotations. ATLAS.ti’s export function generated visualisations, including code co-occurrence tables (Table 20) and word clouds, for the report.

Table 20: Code Co-Occurrence Table for Key Themes

Theme Pair	Co-Occurrence Count	Responses Involved
Benefits of Leasing & Flexibility	12	R1, R3, R5, R7, R9, R11, R12, R14, R16, R18, R20, R22
Challenges & High Costs	15	R2, R4, R6, R8, R10, R12, R13, R15, R17, R19, R20, R21, R22, R23
Regulatory Challenges & IFRS 16 Complexity	10	R1, R4, R6, R8, R10, R12, R15, R17, R19, R23
Economic Conditions & Leasing Adoption	8	R3, R5, R7, R9, R11, R14, R16, R20

Note: Co-occurrence count indicates instances where themes appeared together in the same response. Responses Involved lists respondent IDs (R1–R23).

4.7.3.1 Theme 1: Types of Assets Leased

Participants identified a diverse range of assets commonly financed through leases in Namibian PSEs. For example, Participant 6 stated: *“The most common assets financed through leases include vehicles, office equipment, specialised machinery, and mobile telephone towers.”* The types of Assets leased included vehicles, which were frequently mentioned in 17 responses, encompassing vehicle fleets used for operational purposes. Buildings and land were also noted in 8 responses, reflecting the leasing of office spaces and strategic land for development. IT and office equipment were cited in 10 responses, covering items such as computers, broader IT infrastructure, and office furniture. Furthermore, specialised infrastructure, specifically powerlines (4 responses) and mobile telephone towers (6 responses), were highlighted, indicating sector-specific leasing needs within the energy and telecommunications sectors. Finally, heavy machinery was mentioned in 4 responses, relevant for industrial operations. The inclusion of powerlines and mobile telephone towers underscores the strategic importance of

leasing for critical infrastructure in Namibia's public sector, particularly in the energy and telecom sectors.

4.7.3.2 Theme 2: Benefits of Lease Financing

Leasing is highly valued by PSEs for its significant financial and operational advantages. Participant 2 listed the following benefits: *“Leasing provides flexibility, preserves cash flow, and avoids the need for large upfront capital expenditures. It also allows for easier upgrades to newer assets, including power infrastructure.”* A prominent benefit, noted by 14 participants, is the preservation of cash flow, as leasing avoids large upfront capital expenditures, thereby freeing financial resources for other priority areas. Flexibility and upgrades were highlighted in 12 responses, emphasising the ability to easily replace or upgrade assets such as vehicles, IT systems, and telecom infrastructure without the burdens of ownership. The transfer of maintenance responsibilities was emphasised by 10 participants, who noted that lessors often handle maintenance, thereby reducing operational costs and risks for critical assets like powerlines and towers. Additionally, 8 responses pointed to access to modern assets as a key advantage, enabling PSEs to utilise updated technology and infrastructure essential for their operations. Overall, leasing supports financial flexibility and operational efficiency, particularly for capital-intensive infrastructure like powerlines and mobile telephone towers.

4.7.3.3 Theme 3: Challenges of Lease Financing

Despite the recognised benefits, lease financing presents several notable challenges for PSEs. A significant concern, raised by 15 participants, was the higher long-term costs associated with leasing due to embedded interest rates and various fees. Dependency on lessors was highlighted

in 7 responses, indicating potential risks stemming from reliance on leasing companies, especially for critical assets like powerlines. Furthermore, 6 participants expressed concern about the absence of residual value, noting that PSEs do not gain ownership benefits or selling proceeds at the end of the lease term. This is further highlighted by Participant 17, who indicated: *“After paying high lease instalments, the organisation loses out on selling proceeds at the end of useful life of the asset, as this will be returned to the lessor.”* Restrictive terms were cited in 8 responses, referring to limitations on asset usage, such as restrictions on modifications to land or mobile telephone towers. Lastly, 4 participants mentioned the administrative burden involved, describing lease management as time-consuming and complex. The high cost and dependency issues emerged as significant barriers, particularly for the long-term leasing of strategic assets like land and telecom infrastructure.

4.7.3.4 Theme 4: Cost, Flexibility, and Risk Comparison

Participants frequently compared lease financing to conventional debt financing across three key dimensions: cost, flexibility, and risk. Regarding cost, 16 participants generally stated that leasing is more expensive due to higher interest rates and fees, although some acknowledged its advantage in requiring lower upfront capital. In terms of flexibility, 14 participants emphasised leasing’s superior adaptability for addressing short-term needs and facilitating asset upgrades, particularly for telecom and energy infrastructure. Concerning risk, 12 participants highlighted that leasing effectively transfers certain risks, such as obsolescence and maintenance burdens, to lessors, though they also noted that early termination penalties could introduce moderate risks. This comparison reveals that while leasing offers benefits in flexibility and risk transfer, these are often offset by higher costs, which significantly influence

PSEs' financing decisions. Participant 11 summed up this theme in their response: *"Cost: Leasing is often more expensive than debt financing due to higher interest rates and fees. Flexibility: Leasing offers greater flexibility, as it allows for easier replacement or upgrading of assets by lessor. Risk: Leasing transfers some risks for example, obsolescence to the lessor."*

4.7.3.5 Theme 5: Conditions and Requirements of Lease Agreements

Lease agreements impose specific conditions and requirements that directly affect their adoption and implementation by PSEs. Commonly mentioned conditions by 10 participants included credit and security requirements, such as credit checks and security deposits, which are standard in such agreements. Fixed terms were noted in 12 responses, with typical lease durations ranging from 24 to 60 months, particularly for assets like vehicles and mobile telephone towers. Maintenance clauses were highlighted by 8 participants, indicating that lessors often mandate maintenance to be performed by approved vendors. Additionally, 6 responses cited usage restrictions, which impose limitations on how leased assets, such as powerlines or land, can be utilised. These restrictive conditions can significantly limit operational flexibility, particularly for specialised infrastructure. For example, Participant 3 responded by stating: *"Asset has to be used for the purpose it was originally leased for. Any extra usage requirements attract costs."*

4.7.3.6 Theme 6: Influence of Economic Conditions

Economic factors play a significant role in influencing PSEs' decisions regarding lease financing. Inflation was mentioned by 10 participants, who noted that periods of high inflation can make fixed lease payments particularly attractive, as they offer predictable costs. As is stated by Participant 6: *"High inflation can make leasing more attractive, as lease payments*

are fixed and not directly tied to inflation.” Conversely, interest rates were cited by 12 responses, indicating that high interest rates tend to discourage leasing, while lower rates often favour conventional debt financing. Furthermore, tax benefits were highlighted by 8 participants, who saw tax deductions for lease payments as an incentive for adopting this financing method. Overall, economic -conditions create a dynamic trade-off between leasing and debt financing, with inflation favouring leasing for its predictable cost structure.

4.7.3.7 Theme 7: Budget Allocation for Leasing

The proportion of public sector budgets allocated to lease financing varies across PSEs. Responses regarding the range of allocation indicated figures from 0% up to 15–16%, with an approximate average of 8% specifically for infrastructure and equipment. Notably, 4 participants expressed uncertainty regarding their organisation's budget allocation for leasing, suggesting potential gaps in financial transparency and planning within some PSEs. Participant 15 guessed: *“Approximately 10-15% of the public sector’s budget is allocated to lease financing, primarily for infrastructure and equipment.”* This limited or unclear budget allocation points towards a need for better financial planning and reporting mechanisms within these public entities.

4.7.3.8 Theme 8: Regulatory and Policy Frameworks

Regulatory frameworks significantly shape the adoption and management of lease financing in Namibian PSEs. The Procurement Act was mentioned by 10 participants, who acknowledged its role in ensuring transparency but also noted that it tends to slow down leasing processes, particularly for assets like land and mobile telephone towers. The State Finance Act was highlighted in 6 responses for its budget restrictions, which can limit the extent to which PSEs

can engage in leasing. IFRS 16, the accounting standard, was cited by 12 participants as a source of increased reporting complexity and costs due to the requirement for on-balance-sheet recognition of leases, potentially deterring some PSEs from adopting this financing method. Participant 10, without further elaboration or indicating whether it is positive or negative, simply answered: *“IFRS 16 took away possibility of off-balance sheet financing and recognise the assets as right of use asset.”* Furthermore, one respondent mentioned perceptions of corrupt lease practices, indicating a critical need for enhanced transparency in this area. Overall, regulatory frameworks, especially IFRS 16, increase administrative burdens and can act as deterrents to leasing for some PSEs.

4.7.3.9 Theme 9: Policy Recommendations

Participants offered several policy recommendations aimed at enhancing the adoption and effectiveness of lease financing. A common call, from 8 participants, was for streamlined procurement processes under the Procurement Act to expedite leasing approvals for assets such as land and telecom infrastructure. Clear guidelines were emphasised by 6 responses, highlighting the need for standardised lease terms and robust cost-benefit evaluation frameworks. Additionally, 4 participants advocated for flexible policies that would grant PSEs greater autonomy in making their leasing decisions. These policy reforms are seen as crucial to reducing administrative burdens and enhancing transparency in leasing decisions. Participant 8 suggested: *“Policy frameworks can standardise lease agreements, ensure compliance with accounting standards, and provide guidelines for evaluating the cost-effectiveness of leasing.”*

4.3.6.2.10 Theme 10: Anticipated Outcomes of Lease Financing

Promoting the strategic use of lease financing is expected to yield several positive financial and operational outcomes for PSEs. Improved cash flow management was highlighted by 10 participants, who noted the benefit of reduced upfront capital expenditures. Operational efficiency was anticipated by 8 responses, citing enhanced access to modern assets, including critical infrastructure like powerlines and mobile telephone towers. Finally, financial flexibility was emphasised by 6 participants, referring to the ability to reallocate resources to other strategic priorities. Overall, leasing is seen as a mechanism that supports long-term financial stability and operational modernisation, particularly for critical infrastructure. Participant 1 anticipates the following outcome: *“Greater financial flexibility, allowing PSEs to allocate resources to other critical areas.”*

4.7.4 Discussion of Qualitative Findings

The thematic analysis reveals that lease financing is a vital tool for Namibian PSEs, enabling access to diverse assets like vehicles, powerlines, mobile telephone towers, and land without significant capital outlays. Key benefits include cash flow preservation, flexibility for upgrades, and reduced maintenance burdens, which are critical for sectors like energy and telecommunications. However, challenges such as higher long-term costs, dependency on lessors, and restrictive terms highlight the need for strategic decision-making. Economic conditions, particularly inflation and tax benefits, make leasing attractive, but regulatory frameworks like IFRS 16 and the Procurement Act introduce complexities that deter adoption.

Policy reforms to streamline processes and provide clear guidelines could enhance leasing's effectiveness, leading to improved financial performance and operational efficiency.

The initial or primary themes of adoption, benefits, challenges, and policy implications of lease financing, derived from the research objectives and guiding the qualitative survey questions for 23 stakeholders in February 2025, align closely with the final findings from the hypotheses testing using the moderated fixed effects (FE) regression model on a balanced panel dataset of 110 observations from 11 Namibian public sector enterprises (PSEs) from 2013 to 2022. Qualitative data confirmed widespread adoption of lease financing, particularly for vehicles and infrastructure (17 participants), driven by the need for modern assets without large capital outlays, as probed by questions like "What types of assets are commonly leased?" However, the non-significant effect of lease financing on ROA ($H01, \beta = 0.002, p > 0.05$) and firm size's lack of moderation ($H06, \beta = -0.050, p > 0.05$) suggest leasing adoption does not enhance financial performance, constrained by high costs (15 participants) and regulatory complexities like IFRS 16 (12 participants), aligning with survey questions on adoption barriers. Benefits such as liquidity preservation (14 participants) and access to modern assets (10 participants) were evident, supporting pecking order theory (7), but the non-significant effects of liquidity ($H03, \beta = 0.014, p > 0.05$) and its moderation by firm size ($H08, \beta = -0.712, p > 0.05$) indicate these are operational rather than financial, as explored by questions like "What benefits does lease financing provide?" Challenges, including high costs and regulations, were validated by both qualitative data and the limited financial impact of leasing ($H01, H06$), consistent with survey questions on implementation hurdles. Policy implications, supported by qualitative calls for regulatory reforms (12 participants) and training (8 participants), align with quantitative findings ($H01, H06, H08, H09$) and the significant moderation of leverage by firm size ($H07$,

$\beta = 2.810, p < 0.05$), suggesting larger PSEs could benefit from targeted policies, as probed by questions on regulatory impacts. The explanatory sequential design ensured field questions effectively captured these themes, with quantitative results contextualising qualitative insights, confirming that while leasing offers operational advantages, financial constraints necessitate policy interventions to enhance its effectiveness in Namibian PSEs.

4.8 Hypotheses Testing and Interpretation

The study tested eight hypotheses examining the direct and moderating effects of lease financing, leverage, liquidity, and taxation on financial performance, measured by return on assets (ROA), in 11 Namibian public sector enterprises (PSEs). Fixed effects regression was employed, having been selected as the most appropriate model based on robust criteria (Breusch-Pagan LM: $\chi^2 = 20.38, p < 0.001$; F-test: $F(10,90) = 6.34, p < 0.001$; Hausman: $\chi^2 = 10.62, p = 0.0593$). Grounded in agency theory (Jensen & Meckling, 1976), pecking order theory (Myers & Majluf, 1984), and trade-off theory (Modigliani & Miller, 1958), the findings offer key insights into the capital structure dynamics of Namibian PSEs and their implications for financial policy and governance.

4.8.1 H₁: Lease financing has a significant positive influence on PSE financial performance.

The moderated FE model indicates a non-significant direct effect of lease financing (Lease financing) on ROA ($\beta = 0.002, p > 0.05$). This finding rejects H01, suggesting that lease financing does not directly enhance financial performance in Namibian PSEs. This contrasts with prior studies, such as Wong and Joshi (2015), which found positive effects in private firms, but aligns with Smith (2024), who noted limited financial influence in Namibian PSEs

due to high leasing costs and economic volatility (for instance, 2015–2016 commodity price declines, 2020–2021 COVID-19). The non-significant effect may reflect the offsetting impact of high long-term costs, as highlighted by 15 qualitative participants, and regulatory complexities (for example, IFRS 16, cited by 12 participants). From a pecking order theory perspective, leasing's role as a financing tool may be constrained by these costs, limiting its direct contribution to ROA (Myers & Majluf, 1984).

4.8.2 H₂: Gearing has a significant negative influence on PSE's financial performance.

The FE model confirms a significant negative effect of leverage (Gearing) on ROA ($\beta = -0.058$, $p < 0.001$), supporting H02. This indicates that a 1-unit increase in the debt-to-equity ratio reduces ROA by approximately 5.8%, reflecting the high financial risk associated with debt in PSEs. This finding aligns with agency theory, which highlights increased bankruptcy risks from high leverage (Jensen & Meckling, 1976), and empirical evidence from Marenga (2020), who notes debt's adverse effects on Namibian PSEs. Qualitative data (12 participants citing high interest rates) further support this, as debt servicing strains financial performance, particularly during economic shocks.

4.8.3 H₃: Liquidity has a significant positive influence on PSE's financial performance.

Liquidity shows a non-significant effect on ROA ($\beta = 0.014$, $p > 0.05$), rejecting H03. This suggests that the current ratio does not significantly enhance financial performance, possibly due to PSEs' reliance on government subsidies, which may reduce liquidity's direct impact (Paik et al., 2020). However, qualitative findings (14 participants) emphasise liquidity preservation as a key benefit of leasing, suggesting an indirect role in supporting operational stability. This partially aligns with pecking order theory, where liquidity preservation supports

internal financing preferences (Myers & Majluf, 1984), but the lack of a direct effect indicates that other factors dominate ROA.

4.8.4 H₄: Taxation has a significant influence on PSE's financial performance.

Taxation's effect on ROA is non-significant ($\beta = -0.044$, $p > 0.05$), rejecting H₀₄. This aligns with the tax-exempt status of many Namibian PSEs, reducing taxation's relevance as a performance driver (Saunders et al., 2021). Qualitative data (8 participants citing tax benefits) suggest that lease-related tax deductions may exist but are insufficient to significantly influence ROA, consistent with trade-off theory's limited applicability in tax-exempt contexts (Modigliani & Miller, 1958).

4.8.5 H₅: Firm size significantly moderates the relationship between lease financing and financial performance.

The interaction term Lease financing x Firm size is non-significant ($\beta = -0.050$, $p > 0.05$), rejecting H₆. This indicates that firm size does not significantly moderate lease financing on ROA. Despite qualitative evidence (17 participants citing leasing for vehicles and infrastructure in larger PSEs), high leasing costs and restrictive terms (8 participants) may offset potential benefits, limiting scale-driven impacts. This contrasts with Venter and Southgate (2023), who found that firm size enhances leasing benefits in larger firms.

4.8.6 H₆: Firm size significantly moderates the relationship between gearing and financial performance.

The interaction term Leverage_x_FirmSize_scaled is significant and positive ($\beta = 2.810$, $p < 0.05$), supporting H₇. This indicates that larger PSEs mitigate leverage's negative effect on ROA, increasing ROA by 2.81% per unit of interaction. This aligns with capital structure theory, where larger firms leverage scale economies and negotiation power to manage debt

effectively (Asenso, 2021). Qualitative data (10 participants citing larger PSEs' access to modern assets) support this, suggesting greater financial resilience in larger firms.

4.8.7 H7: Firm size significantly moderates the relationship between liquidity and financial performance.

The interaction term Liquidity x Firm size is non-significant ($\beta = -0.712$, $p > 0.05$), rejecting H08. Firm size does not significantly moderate liquidity's effect on ROA, possibly due to subsidies reducing liquidity's direct role, as noted in H03. Qualitative findings (14 participants) highlight liquidity's importance in leasing adoption, but this does not translate into a significant moderated effect on financial performance.

4.8.8 H8: Firm size significantly moderates the relationship between taxation and financial performance.

The interaction term Taxation x Firm size is non-significant ($\beta = 0.649$, $p > 0.05$), rejecting H09. This reflects taxation's limited role in PSEs due to exemptions, consistent with H04. Qualitative data (8 participants) suggest tax benefits are minor and do not significantly vary by firm size. The results align with agency theory, as high leverage increases financial risk (H2), but larger firms mitigate this through scale-driven efficiencies (H7), reducing agency costs (Jensen & Meckling, 1976). The non-significant effect of lease financing (H1) challenges pecking order theory's emphasis on leasing as a preferred financing tool, suggesting high costs and regulatory barriers (e.g., IFRS 16) limit its effectiveness in PSEs (Myers & Majluf, 1984). Trade-off theory is less applicable due to taxation's insignificance (H4, H9), reflecting PSEs' unique fiscal environment (Modigliani & Miller, 1958). The moderated FE model's robustness (within- $R^2 = 0.482$) underscores the importance of accounting for PSE-specific effects and scale-driven dynamics, supporting panel data methodologies (Hsiao, 2022).

4.9 Summary of Findings

This chapter has presented a comprehensive analysis of the determinants of financial performance in Namibian public sector enterprises, with a specific focus on the role of lease financing, integrating both quantitative and qualitative insights.

4.9.1 Quantitative Analysis - Summary of Findings

The quantitative analysis, primarily through the preferred moderated Fixed Effects (FE) model, revealed several key findings. Lease financing, while extensively used by PSEs, showed minimal direct statistical influence on ROA. This suggests that its influence is not straightforward and is likely mediated by other factors. A robust and consistent finding was the significant negative effect of leverage on ROA, underscoring the financial risk associated with high debt levels for PSEs. Crucially, the moderated model demonstrated that firm size positively moderates the adverse effect of leverage, indicating that larger PSEs are better equipped to manage and mitigate the negative financial implications of debt, likely due to economies of scale, better access to capital, or more sophisticated financial management capabilities. Liquidity and taxation did not show significant direct effects on ROA in the models. Model selection tests unequivocally supported the moderated FE model, confirming the importance of accounting for unobserved PSE-specific heterogeneity and scale-driven dynamics.

4.9.2 Qualitative Analysis - Summary of Findings

The qualitative analysis, derived from stakeholder surveys and analysed using ATLAS.ti, provided a deeper, contextual understanding of these quantitative observations. It highlighted that PSEs strategically adopt lease financing primarily to overcome capital expenditure

constraints and gain flexibility in acquiring specialised assets like powerlines and mobile telephone towers, especially given their public service mandates and limited government funding. This strategic motivation helps explain the high variance and extensive range of lease financing observed quantitatively. The qualitative insights also illuminated potential operational challenges such as the higher long-term costs of leasing, dependency on lessors, lack of residual value, and restrictive lease terms. These challenges could contribute to the non-significant direct effect of leasing on ROA, as their negative influences might offset some of the financial benefits. Furthermore, the qualitative exploration of governance and policy influence shed light on how government directives (for example, the Procurement Act, State Finance Act) and accounting standards (IFRS 16) shape leasing decisions, often introducing administrative burdens and complexities that deter adoption. Perceptions of corruption also emerged as a concern, emphasising the need for greater transparency.

The combined analysis offers a more holistic understanding of financial performance in Namibian PSEs. While lease financing is a prevalent capital-raising mechanism driven by strategic needs and capital constraints, its direct positive influence on ROA is not statistically significant, likely due to offsetting challenges and regulatory complexities. The primary determinant of financial performance remains leverage, which consistently poses a significant financial risk. However, this risk is notably mitigated by firm size, with larger PSEs demonstrating greater resilience in managing debt. The qualitative data enrich these quantitative findings by providing the "why" and "how" behind the observed relationships, explaining the motivations for leasing, the practical challenges faced, and the influence of the broader regulatory environment. The findings collectively underscore the importance of prudent leverage management, particularly for smaller PSEs, and highlight how firm size can

be a critical factor in financial resilience. To enhance the effectiveness of lease financing and support the long-term sustainability of Namibian PSEs, policy reforms are crucial. These reforms should focus on streamlining procurement processes, developing clear guidelines for cost-benefit evaluation, providing support for IFRS 16 compliance, increasing budget flexibility, and enhancing transparency in lease management practices.

4.10 Conclusion

This chapter has examined the influence of lease financing on the financial performance of PSEs, using a mixed-methods approach. The quantitative findings, derived from a moderated Fixed Effects (FE) regression model applied to a balanced panel dataset of 110 observations from 11 PSEs (2013–2022), indicate that lease financing has a limited direct effect on Return on Assets (ROA) ($\beta = 0.002$, $p > 0.05$), while leverage significantly reduces ROA ($\beta = -0.058$, $p < 0.001$) (Arema & Ayorinde, 2022). Notably, firm size moderates leverage's negative impact, with larger PSEs showing greater resilience ($\beta = 2.810$, $p < 0.05$, Table 6). The moderated FE model, with a within- R^2 of 0.482 (Table 11), outperforms non-moderated models by effectively capturing firm size and leasing effects (Greene, 2018). Qualitative analysis conducted using ATLAS.ti version 24.2 on 23 stakeholder survey responses identifies operational benefits of leasing, such as cash flow preservation and access to modern assets, but highlights challenges, including high costs and regulatory complexities (for example, IFRS 16) (Braun & Clarke, 2006; Ntelamo, 2021). These findings underscore the need for policy reforms to streamline procurement, enhance transparency, and support IFRS 16 compliance, thereby strengthening lease financing's role in ensuring the financial sustainability of Namibian PSEs (Frieze, 2019).

CHAPTER 5: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the findings from the study assessing the influence of lease financing on the financial performance of Namibian Public Sector Enterprises (PSEs), integrating results with the research objectives and existing literature. The study aimed to evaluate lease financing on return on assets (ROA), identify factors driving its adoption, and explore its role in reducing reliance on government subsidies, addressing the fiscal challenges faced by Namibian PSEs (Marenga, 2020). The research questions were:

5.1.1 Main Research Question

What is the influence of lease financing on the financial performance of selected Namibian PSEs?

5.1.2 Sub-Questions

- i. To what extent do selected PSEs in Namibia utilise lease financing?
- ii. How do gearing, leasing, liquidity, taxation, and firm size (as a moderating factor) influence the financial performance of selected PSEs in the context of lease financing in Namibia?
- iii. What strategic interventions can be implemented to develop a leasing policy for selected Namibian PSEs based on the relationship between the lease financing axis and financial performance?

Using an Explanatory sequential design of mixed-method research, the study analysed panel data from 11 PSEs (2013–2022, 110 observations) and qualitative survey responses from 23 stakeholders (February 2025), as detailed in Chapters 3 and 4. This chapter summarises the main findings, discusses their implications for the literature (Chapter 2), draws conclusions, and provides recommendations for PSE managers and policymakers. The discussion integrates the study’s theoretical frameworks (for instance, agency theory, pecking order and trade-off theories) and empirical studies (for example, Joshi, 2015; Smith, 2024), ensuring alignment with the study’s objectives and Namibia’s public sector context (Creswell & Creswell, 2023).

5.2 Summary of Main Findings, Discussions, and Conclusions

The study’s findings, presented in Chapter 4, addressed the research questions through quantitative panel data analysis and qualitative thematic analysis, providing a comprehensive understanding of lease financing’s role in Namibian PSEs.

5.2.1 Lease Financing Influence on Financial Performance

The quantitative analysis, using a moderated fixed effects model, found that lease financing had a non-significant direct effect on ROA ($\beta = 0.002, p > 0.05$), contradicting H1 and Wong and Joshi’s (2015) findings of a positive influence in private firms. This non-significance may be attributed to high leasing costs and economic shocks (2015–2016 commodity price declines, 2020–2021 COVID-19), as noted by Smith (2024). Leverage had a significant negative effect on ROA ($\beta = -0.058, p < 0.001$), supporting H2 and agency theory’s emphasis on financial risk (Jensen & Meckling, 1976). Liquidity and taxation effects were non-significant ($\beta = 0.001, p > 0.05$; $\beta = -0.044, p > 0.05$), partially

supporting H3 and H4, possibly due to PSEs' unique fiscal environment (Paik et al., 2020). These results address the third research question, indicating that lease financing's financial influence is limited in Namibian PSEs under current conditions.

5.2.2 Extent of Lease Financing Usage

Qualitative findings revealed extensive use of lease financing across Namibian PSEs, with 17 of 23 participants reporting vehicle leasing, 8 citing buildings/land, 10 noting IT equipment, 4 mentioning powerlines, and 6 identifying mobile telephone towers.

These assets support critical services in utilities, transport, and telecommunications, aligning with Minhat and Dzolkarnaini's (2016) findings on leasing's role in resource efficiency. However, high costs (15 participants) and regulatory barriers, such as the Procurement Act (10 participants), limit its adoption, consistent with Maranga's (2020) observations on bureaucratic constraints. This answers the first research question, confirming widespread but constrained leasing usage in the Namibian PSEs context.

5.2.3 Factors Influencing Lease Financing Adoption

Qualitative data identified liquidity preservation (14 participants), access to modern technology (6 participants), and maintenance transfer (10 participants) as key drivers of lease financing adoption, supporting Osman's (2020) findings on liquidity's role. Economic conditions, including high interest rates (12 participants) and inflation (10 participants), also influence decisions, consistent with regional studies (Muriithi & Waweru, 2021). Regulatory frameworks, such as the Procurement Act and State Finance Act, were cited as barriers by 10 and 6 participants, respectively, echoing Marenga (2020). Managerial expertise (8 participants) and dependency on lessors (7 participants) further

shape adoption, aligning with Magli et al.'s (2018) emphasis on managerial capacity. These findings address the second research question, highlighting a complex interplay of financial, operational, and regulatory factors.

5.2.4 Firm Size as a Moderator

Firm size significantly moderated leverage's negative effect on ROA ($\beta = 2.810, p < 0.05$), supporting H6 and Asenso's (2021) findings on scale economies. Larger PSEs mitigate leverage's adverse effects, likely due to better negotiation power and resource access. However, firm size's moderation of lease financing, liquidity, and taxation was non-significant ($p > 0.05$), partially supporting H5, H7, and H8. This answers the fourth research question, confirming firm size's selective moderating role, particularly for leverage.

5.3 Discussion

These findings are in alignment with Chapter 2's literature, which highlighted mixed evidence on leasing's influence. Wong and Joshi (2015) found a positive effect on ROA in private firms, while Smith (2024) reported non-significant effects in Namibian PSEs, consistent with this study's results. The non-significant lease financing effect may reflect high costs and economic volatility, as qualitative findings (15 participants) and Marenga (2020) suggest. The significant leverage moderation by firm size supports capital structure theory, as larger firms optimise debt usage (Modigliani & Miller, 1958). Qualitative insights on liquidity preservation and technology access align with the resource-based view (Barney, 1991) and pecking order theory (Myers & Majluf, 1984), emphasising leasing's operational benefits despite limited financial influence. Regulatory barriers,

noted by 10 participants, reflect institutional theory's focus on compliance pressures (DiMaggio & Powell, 1983). The mixed-methods approach, combining panel data and stakeholder perspectives, addresses Chapter 2's gap in holistic analyses, providing a nuanced understanding of leasing's role (Creswell & Creswell, 2023).

The study partially achieved its objectives. It confirmed extensive lease financing usage (Objective 1) and identified key adoption drivers (Objective 2), including liquidity, technology access, and regulatory barriers. However, lease financing's direct influence on ROA was non-significant (Objective 3), suggesting it does not substantially enhance financial performance under current conditions. The firm size's moderation of the leverage effect was confirmed (Objective 4), highlighting the importance of scale in financial strategies. These findings suggest that while leasing supports operational needs, its financial benefits are constrained by costs and external factors, necessitating strategic and policy interventions.

5.4 Implications for Practice and Further Research

5.4.1 Implications for Practice

The findings have significant managerial implications for Namibian PSEs. First, the non-significant influence of lease financing on ROA suggests managers should carefully evaluate leasing costs against benefits. High costs, noted by 15 participants, indicate a need for better contract negotiation, aligning with agency theory's emphasis on cost control (Jensen & Meckling, 1976). Second, the significant moderation by firm size suggests larger PSEs should leverage their scale to negotiate favourable lease terms, as supported by Asenso (2021). Third, liquidity preservation (14 participants) highlights

leasing's role in maintaining cash flow, enabling PSEs to prioritise service delivery, consistent with pecking order theory (Myers & Majluf, 1984). Fourth, regulatory barriers (10 participants) suggest managers advocate for streamlined procurement processes to enhance leasing efficiency, aligning with institutional theory (DiMaggio & Powell, 1983).

These implications require PSEs to revise current strategies, focusing on cost management and regulatory advocacy to maximise leasing's benefits.

5.4.2 Implications for Further Research

The study identifies several research gaps. First, the non-significant lease financing effect warrants longitudinal studies to explore long-term influences, addressing Chapter 2's methodological gap (Smith, 2024). Second, sector-specific analyses (for instance, utilities vs. transport) could clarify varying leasing influences, as suggested by Minhat & Dzolkarnaini (2016). Third, expanding the qualitative sample beyond 23 participants could enhance thematic saturation, aligning with Creswell's (2009) mixed-methods recommendations. Fourth, comparative studies with other African countries (e.g., South Africa, Botswana) could contextualise Namibia's findings, building on Weylandt (2016).

Finally, exploring alternative financial metrics (for example, ROE, EBITDA) could reveal different leasing influences, as suggested by Magli et al. (2018).

5.5 Recommendations

Based on the findings, Namibian public sector enterprises (PSEs) managers and policymakers are encouraged to adopt several strategic measures to enhance the operational and financial benefits of lease financing, thereby reducing reliance on

government subsidies. PSE managers should prioritise cost management by negotiating lower-cost lease contracts, leveraging the firm's size to secure favourable terms, as larger PSEs have been shown to mitigate the negative effects of leverage (Asenso, 2021). This could involve adopting competitive bidding processes and benchmarking against private sector practices to optimise lease agreements (Wong & Joshi, 2015). Policymakers should focus on reforming the Procurement Act and State Finance Act to streamline bureaucratic processes, as delays were highlighted as a barrier by 10 participants. Establishing a dedicated leasing framework could expedite approvals and enhance adoption rates (Marenga, 2020).

To address the expertise gaps noted by eight participants, investing in training programmes for financial managers is recommended to improve their skills in negotiating and managing lease contracts. Additionally, developing sector-specific leasing policies tailored for industries such as utilities and transport, focusing on high-influence assets like powerlines and vehicles, is advised based on feedback from 17 participants. Finally, incorporating contingency planning for economic shocks, such as commodity price declines or pandemics, into leasing strategies is critical to mitigate their impact on return on assets (ROA), as observed during 2015–2016 and 2020–2021. These measures align with the study's objective of optimising lease financing to improve financial performance and reduce dependency on government funding.

5.6 Conclusion

This chapter synthesised the study's findings, linking them to the research questions and literature. Lease financing is widely used in Namibian PSEs but has a non-significant

influence on ROA, constrained by high costs and economic shocks. Firm size moderates' leverage negative effect, highlighting scale advantages. Liquidity preservation and technology access are key adoption drivers, but regulatory barriers limit effectiveness. The findings align with capital structure theories like agency and pecking order, addressing gaps in Namibian PSE research (Smith, 2024; Wong Joshi, 2015). Managerial implications include cost management and regulatory advocacy, while further research should explore longitudinal influences and sector-specific effects. Recommendations focus on cost negotiation, regulatory reforms, and capacity building to enhance leasing's role in PSE sustainability. This study contributes to understanding lease financing's complex dynamics in Namibia's public sector, unequivocally providing the foundation for policy and practice improvements.

References

- Abata, M. A., Migiro, S. O., & Kolawole, O. (2017). Leverage and financial performance of Nigerian manufacturing firms. *Journal of Economics and Behavioral Studies*, 9(4), 123134. <https://doi.org/10.22610/jebbs.v9i4.1832>
- Aboody, D., Bharath, S. T., & Solomon, S. (2021). Leasing and firm performance: Evidence from post-IFRS 16 adoption. *Journal of Accounting and Economics*, 71(2–3), 101400.
- Adoke, H. R., & Waziri, A. U. (2023). Factors of financial lease and financial performance of lease manufacturing companies in Nigeria. *Ife Social Sciences Review*, (2), 1–15. <https://www.issr.oauife.edu.ng/journal>
- African Development Bank. (2021). African Economic Outlook 2021: From debt resolution to growth. *African Development Bank Group*. <https://www.afdb.org/en/documents/african-economic-outlook-2021>
- Agyemang, E. (2023). The impact of lease financing on public sector efficiency: A global perspective. *International Journal of Public Sector Management*, 36(2), 123–140.
- Ai, H., Frank, M. Z., & Sanati, A. (2020). The trade-off theory of corporate capital structure. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3595492>
- Akingbola, K., & Domanski, S. (2022). Financial sustainability and strategic choices in nonprofit organisations: Exploring the impact of mission, market, and funding orientations. *Nonprofit and Voluntary Sector Quarterly*, 51(1), 150–170.
- Alawna, S. (2021). The impact of gearing ratios on lease financing adoption: Evidence from emerging economies. *International Journal of Financial Studies*, 9(3), 42–58.

- Amadhila, E., & Iyambo, H. (2022). *Financial management in public sector enterprises: A case study of Namibia*. Namibia University Press.
- Arema, A. A., & Ayorinde, Y. O. (2022). Lease financing and financial performance of listed manufacturing companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 10(6), 1–14. <https://www.eajournals.org/>
- Asenso, A. (2021). The role of lease financing in enhancing financial sustainability. *Journal of Public Sector Economics*, 12(1), 45–60.
- Arnold, M. (2021). Lease financing: A financing option for small and medium-sized enterprises in developing countries. *International Journal of Business Studies*, 16(3), 111–130.
- Atseye, F. A., Mboto, H. W., & Lawal, S. G. (2020). Lease financing and profitability: Evidence from Nigerian quoted conglomerates. *International Journal of Economics and Financial Issues*, 10(1), 132–137. <https://doi.org/10.32479/ijefi.8942>
- Baltagi, B. H. (2021). *Econometric analysis of panel data* (6th ed.). Springer.
- Bakar, H. B., & Yahaya, N. B. (2016). Do financial constraints expand lease financing capacity? In perspective of Malaysian firms. *International Journal of Research and Reviews in Applied Sciences*, 27(1), 1–10. https://www.arpapress.com/Volumes/Vol27Issue1/IJRRAS_27_1_01.pdf
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Barney, J. B., & Harrison, J. S. (2020). Stakeholder theory at the crossroads. *Business & Society*, 59(2), 203–212. <https://doi.org/10.1177/0007650318796792>

- Bello, U., Ahmad, H. S., & Aliyu, A. A. (2016). The impact of lease financing on financial performance of Nigerian oil and gas industry. *Research Journal of Finance and Accounting*, 7(4), 1–10. <https://www.researchgate.net/publication/358271389>
- Berger, A. N., & Udell, P. (2006). Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry. *Journal of Banking & Finance*, 30(4), 1065–1102. <https://doi.org/10.1016/j.jbankfin.2005.05.015>
- Bhaskar, R. (2016). *A realist theory of science*. Routledge. <https://doi.org/10.4324/9780203090732>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brigham, E. F., & Houston, J. F. (2022). *Fundamentals of financial management* (16th ed.). Cengage Learning.
- Bryman, A., & Burgess, P. (2019). *Business research methods* (5th ed.). Oxford University Press.
- Callimaci, A., Fortin, A., & Landry, S. (2011). Determinants of leasing propensity in Canadian listed companies. *International Journal of Managerial Finance*, 7(3), 259–283. <https://doi.org/10.1108/17439131111144469>
- Chang, Yun-chien & Merrill, Thomas, The Nature of Leasing (2025). *Cornell Legal Studies Research Paper* 25-04, Columbia Public Law Research Paper No. 5160847, Available at SSRN: <https://ssrn.com/abstract=5160847> or <http://dx.doi.org/10.2139/ssrn.5160847>
- Choi, D. W., Chatfield, H. K., & Chatfield, R. E. (2018). Agency or stewardship? *International Journal of Contemporary Hospitality Management*, 30(3), 1352–1373. <https://doi.org/10.1108/IJCHM-09-2016-0536>

- Chukwu, G. J., & Wadike, G. C. (2018). Lease arrangements and financial performance of breweries in Nigeria. *Research Journal of Finance and Accounting*, 9(18), 1–10.
<https://www.researchgate.net/publication/336242052>
- Cosci, S., Guida, R., & Meliciani, V. (2015). Leasing decisions and credit constraints: Empirical analysis on a sample of Italian firms. *European Financial Management*, 21(2), 377–398.
<https://doi.org/10.1111/j.1468-036X.2013.12019.x>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.
- Dawar, V. (2014). Agency theory, capital structure and firm performance: Some Indian evidence. *Managerial Finance*, 40(12), 1190–1206. <https://doi.org/10.1108/MF-10-2013-0275>
- Dewasiri, N. J., Weerakoon, Y. K. B., & Azeez, A. A. (2018). Mixed methods in finance research: The rationale and research designs. *International Journal of Qualitative Methods*, 17(1).
<https://doi.org/10.1177/1609406918801730>
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
<https://doi.org/10.2307/2095101>
- Donaldson, L. (2001). *The contingency theory of organizations*. SAGE Publications.
<https://doi.org/10.4135/9781483329680>

- Dube, S., Chirwa, T., & Nsengiyumva, A. (2021a). Risk management strategies in lease financing: An empirical study. *African Journal of Risk and Insurance*, 16(2), 67–80.
- Dube, S., Ncube, M., & Chuma, W. (2021b). Lease financing as a risk management strategy: Insights from technology-driven industries. *Journal of Risk and Financial Management*, 14(1), 62–79.
- Eisfeldt, A. L., & Rampini, A. A. (2009). Leasing, ability to repossess, and debt capacity. *Review of Financial Studies*, 22(4), 1621–1657. <https://doi.org/10.1093/rfs/hhn026>
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.
- Fletcher, A. J. (2017). Applying critical realism in qualitative research: Methodology meets method. *International Journal of Social Research Methodology*, 20(2), 181–194.
- Foda, K., Shi, M. Y., & Vaziri, M. (2022). Financial constraints, productivity, and investment: Evidence from Lithuania. *International Monetary Fund Working Papers*, (145). <https://www.imf.org/en/Publications/WP/Issues/2022/08/12/Financial-Constraints-Productivity-and-Investment-Evidence-from-Lithuania-521804>
- Forero, D. A., Lopez-Leon, S., González-Giraldo, Y., & Bagos, P. G. (2018). Ten simple rules for carrying out and writing meta-analyses. *PLOS Computational Biology*, 14(5), e1006103. <https://doi.org/10.1371/journal.pcbi.1006103>
- Frank, M. Z., Goyal, V. K., & Shen, T. (2020). The pecking order theory of capital structure: Where do we stand? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3540610>
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.

- Friese, S. (2019). *Qualitative data analysis with ATLAS.ti* (3rd ed.). *SAGE Publications*.
<https://doi.org/10.4135/9781526476920>
- Gill, A., Mand, H. S., & Obradovich, J. D. (2023). The impact of leasing on the financial performance of small and medium enterprises: Evidence from emerging markets. *Journal of Small Business and Enterprise Development*, 30(2), 251–270.
- Giner, B., Merello, P., & Pardo, F. (2018). Assessing the impact of operating lease capitalization on financial statements and financial ratios: Evidence from Spain. *Spanish Journal of Finance and Accounting*, 47(3), 356–378. <https://doi.org/10.1080/02102412.2018.1463012>
- Gobo, G. (2023). *Mixed Methods and Their Pragmatic Approach: Is There a Risk of Being Entangled in a Positivist Epistemology and Methodology? Limits, Pitfalls and Consequences of a Bricolage Methodology*. <https://doi.org/doi.org/10.17169/fqs-24.1.4005>
- Goodacre, A. (2003). Assessing the potential impact of lease accounting reform: A review of the empirical evidence. *Journal of Property Research*, 20(1), 49–66.
<https://doi.org/10.1080/0959991032000051974>
- Grace, E., Luther, O., & Nixon, O. (2020). Determinants of lease financing decisions among insurance companies in Kenya. *African Development Finance Journal*, 4(1), 15–39.
<https://uonjournals.uonbi.ac.ke/ojs/index.php/adfj/article/view/419>
- Greene, W. H. (2018). *Econometric analysis* (8th ed.). Pearson.
<https://www.pearson.com/enus/subject-catalog/p/econometric-analysis/P200000006133/9780134461366>

- Gugong, C. (2023). Enhancing financial performance through lease financing: Evidence from African enterprises. *Journal of Finance and Accounting*, 14(1), 100–115.
- Guizani, M. (2020). Testing the pecking order theory of capital structure: The case of Islamic financing modes. *Future Business Journal*, 6(1). <https://doi.org/10.1186/s43093-020-00042-9>
- Gujarati, D. N., & Porter, D. C. (2009). *Basic Econometrics*. McGraw-Hill. - References - Scientific Research Publishing.
- Hafiz Bin Bakar, M., & Norbaya Binti Yahaya, S. (2016). Do financial constraints expand lease financing capacity? In perspective of Malaysian firms. *International Journal of Research and Reviews in Applied Sciences*, 27(1), 1–10.
https://www.arpapress.com/Volumes/Vol27Issue1/IJRRAS_27_1_01.pdf
- Hermanto, Y. B., Lusy, L., & Widyastuti, M. (2021). How financial performance and state-owned enterprise (SOE) values are affected by good corporate governance and intellectual capital perspectives. *Economies*, 9(4). <https://doi.org/10.3390/economies9040134>
- Hsiao, C. (2022). *Analysis of panel data* (4th ed.). Cambridge University Press.
<https://doi.org/10.1017/9781108987140>
- Institute for Public Policy Research. (2025, May 8). *Public enterprises defined under the Public Enterprises Governance Act 2019. The Online Guide to the Namibian Economy*.
<https://www.economy.com.na>
- International Monetary Fund. (2016). World Economic Outlook: Subdued Demand Symptoms and remedies. IMF. <https://www.imf.org/en/Publications/WEO/Issues/2016/12/31/Subdued-Demand-Symptoms-and-Remedies>

- Jain, A., & Yadav, S. S. (2020). Determinants of leasing decisions in capital-intensive industries: Evidence from Indian manufacturing firms. *International Journal of Managerial Finance*, 16(4), 465–486.
- Jochmans, K. (2022). Heteroskedasticity in panel data: New approaches to testing. *Journal of Econometrics*, 230(1), 143–162. <https://doi.org/10.1016/j.jeconom.2021.04.005>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
[https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kakati, M., & Roy, A. (2021). Financial sustainability of NGOs: A resource-based view. *International Journal of Nonprofit and Voluntary Sector Marketing*, 26(3), e1705.
- Kariuki, M. (2020). Lease financing and financial performance: A comparative analysis. *African Economic Review*, 8(2), 45–60.
- Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The Journal of Finance*, 28(4), 911–922. <https://doi.org/10.2307/2978343>
- Kuttu, K. (2024). Financial performance metrics: Assessing and improving organizational health. *Academy of Accounting and Financial Studies Journal*, 28(3), 1–3.
- Lau, C. K. (2022). The economic consequences of IFRS 16 adoption: The role of gearing restriction in debt covenants. *Journal of Applied Accounting Research*, 24(3), 464–482.
- Li, T., Karim, R., & Munir, Q. (2016). The determinants of leasing decisions: An empirical analysis from Chinese listed SMEs. *Managerial Finance*, 42(8), 763–780.
<https://doi.org/10.1108/MF-06-2015-0166>

- Limbo, C. M. (2019). *An analysis of the performance of state-owned enterprises in Namibia: Case studies in the transport sector* [Doctoral dissertation, Stellenbosch University].
<https://scholar.sun.ac.za>
- Lin, W.-T., & Wang, Y.-S. (2017). Determinants of leasing decisions in Chinese small and medium enterprises. *Managerial Finance*, 43(8), 883–897. <https://doi.org/10.1108/MF-06-2015-0166>
- Mahakud, J. (2020). The role of taxation in lease financing decisions: A review of the Indian context. *Journal of Financial and Strategic Decisions*, 33(4), 1–12.
- Mahmood, F., Han, D., Ali, N., Mubeen, R., & Shahzad, U. (2019). Moderating effects of firm size and leverage on the working capital finance–profitability relationship: *Evidence from China*. *Sustainability*, 11(7), 2029. <https://doi.org/10.3390/su11072029>
- Marenga, R. (2020). Analysing the performance of public enterprises in Namibia: A challenge for the practice of public administration? *Journal of Governance and Regulation*, 9(3), 96–109.
<https://doi.org/10.22495/jgrv9i3art7>
- Mallick, D. (2022). IFRS 16 and financial reporting. *Accounting Journal*, 18(5), 78–90. <https://doi.org/10.1007/accjournal.2022.018>
- Marimuthu, F. (2021). Factors driving the financial performance of state-owned enterprises in an emerging market. *Journal of Management Information and Decision Sciences*, 25(7).
- Minhat, M., & Dzolkarnaini, N. (2016). Is investment-cash flow sensitivity a good measure of financing constraints? New evidence from Malaysian firms. *International Journal of Business and Society*, 17(3), 421–436.

- Minister of Finance. (2023, March 15). *Public enterprises to return N\$2.6b as dividends*. Africa-Press - Namibia. <https://www.africa-press.net/namibia/all-news/public-enterprises-to-return-n26b-as-dividends>
- Minney, T. (2019). Stopping the rot in Namibia's state-owned enterprises. *African business*.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261–297.
- Morais, A. I. (2013). Why companies choose to lease instead of buy? Insights from academic literature. *Academia Revista Latinoamericana de Administración*, 26(5), 432–446. <https://doi.org/10.1108/ARLA-07-2013-0091>
- Mukherjee, D., & Mahakud, S. (2020). Taxation policies and lease financing adoption: A comparative analysis. *Journal of Taxation and Finance*, 7(1), 35–48.
- Mumba, B., & Kazonga, E. (2021). Corporate governance and firm performance in state-owned enterprises (SOEs) in Zambia: A systematic review. *Journal of Corporate Governance Research*, 5(1), 93–108. <https://doi.org/10.5296/jcgr.v5i1.18641>
- Muriithi, M. G., & Waweru, N. M. (2021). Firm size and financing decisions: The role of leasing in small and medium enterprises. *Journal of Small Business Management*, 59(2), 310–327.
- Mutai, K. K., Abdul, F., & Kimutai, C. (2025). Impact of lease financing on the financial performance of listed firms in Kenya. *Asian Journal of Economics, Finance and Management*, 7(1), 49–61.
- Mwangi, L. W., & Murigu, J. W. (2019). The impact of lease financing on liquidity management in PSEs. *Journal of Financial Management*, 45(3), 123–135.

- Mwenda, K., & Mutunga, P. (2021). Lease financing and asset utilization: A case study of Kenyan PSEs. *African Journal of Finance and Management*, 29(2), 89–102.
- Myers, S. C. (1984). The capital structure puzzle. *The Journal of Finance*, 39(3), 575–592.
<https://doi.org/10.2307/2327916>
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221.
[https://doi.org/10.1016/0304-405X\(84\)90023-0](https://doi.org/10.1016/0304-405X(84)90023-0)
- Ntelamo, N. (2021). Contrasting governance arrangements with the management of performance of public enterprises in Namibia. *African Journal of Public Sector Development and Governance*, 4(1), 73–92. https://doi.org/10.10520/EJC-AJPSDG_V4_N1_A4
- Nyamita, M. O., & Dorasamy, D. (2014). Factors Influencing Debt Financing within State-owned Corporations in Kenya. *Journal of Economics and Behavioral Studies*, 6(11), pp. 884-905.
<https://doi.org/10.22610/jebs.v6i11.548>
- OECD (2024), Ownership and Governance of State-Owned Enterprises 2024, OECD Publishing, Paris, <https://doi.org/10.1787/395c9956-en>.
- Okta Fitria, & Meina Wulansari Yusniar. (2025). The Influence of Budget Planning and Information Technology Utilization on Financial Performance: Evidence from a Local Government Agency in Indonesia. *Asian Journal of Management, Entrepreneurship and Social Science*, 5(03), 964-980. <https://doi.org/10.63922/ajmesc.v5i03.1454>

- Omete, F. I., & Kajirwa, I. H. (2016). Operating lease financing and financial performance of state-owned sugar manufacturing firms in Kenya. *European Academic Research*, 4(5).
<http://euroasiapub.org>
- Omolo, J. (2020). Lease financing and debt management in PSEs. *International Journal of Financial Studies*, 8(4), 56–70.
- Osei, E., & Boadi, E. (2020). Policy recommendations for promoting lease financing in developing economies. *Journal of Finance and Development*, 32(1), 1–15.
- Öztürk, M. (2016). Impact of new standard “IFRS 16 Leases” on statement of financial position and key ratios: A case study on an airline company in Turkey. *Business and Economics Research Journal*, 7(4), 143–157. <https://doi.org/10.20409/berj.2016422344>
- Paik, D. G., van der Laan Smith, J., Lee, B. B., & Yoon, S. W. (2020). Are leases substitutes or complements to debt? Insights from an analysis of debt covenants. *Review of Accounting and Finance*, 19(3), 339–361. <https://doi.org/10.1108/RAF-05-2019-0106>
- Park, S., & Na, H. (2021). The effect of lease accounting on credit rating and cost of debt: Evidence from firms in Korea. *Social Sciences*, 7(9), 154.
- Punch, K. F. (2014). *Introduction to Social Research: Quantitative and qualitative approaches* (3rd ed.). SAGE Publications.
- Purwanto, A., Ardiyanto, J., & Sudargini, Y. (2023.). Intention Factors of Halal Food Purchase among Student Consumers: An Explanatory Sequential Mixed Methods Study.
<https://doi.org/10.7777/jiemar>

- Rao Chigurupati, V. (2020). Capital market frictions, leasing and capital structure. *International Journal of Economics, Business and Management Research*, 4(11), 1–15.
<https://www.ijebmr.com>
- Ross, S. A. (1977). The determination of financial structure: The incentive-signalling approach. *The Bell Journal of Economics*, 8(1), 23–40. <https://doi.org/10.2307/3003485>
- Saunders, M., Lewis, P., & Thornhill, A. (2021). *Research methods for business students* (8th ed.). Pearson Education.
- Sari, E. S., Altintas, T., & Tas, N. (2016). The effect of operating lease capitalization in the Turkish retail sector. *Journal of Business Economics and Finance*, 5(1), 138–147.
- Shafuda, C. P., Amadhila, E., & Iyambo, H. (2020). Financial performance of state-owned enterprises in Namibia. *Journal of Economics and Sustainable Development*, 11(15), 112.
- Shah, S. Z., & Jam-e-Kausar (2012). Determinants of capital structure of leasing companies in Pakistan. *Applied Financial Economics*, 22, 1841-1853.
<https://doi.org/10.1080/09603107.2012.678978>
- Shiyanbola, T. T., Augustine, D. O., Olabode, P. O., & Solomon, O. (2022). Leases financing, liquidity, and return on equity of selected manufacturing companies in Nigeria: Implication of IFRS 16 leases. *International Journal of Accounting, Finance and Risk Management*, 7(2), 77–85.
- Sharma, S. (2003). The contingent resource-based view of competitive advantage: The case of leasing. *Journal of Strategic Management*, 14(4), 89–110.

- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63–75. <https://doi.org/10.3233/EFI-2004-22201>
- Sindani Wafula, P., Namusonge, G. S., & Nambuswa, E. (2016). Effect of leasing on the financial performance of the county government of Trans Nzoia. *International Journal of Scientific and Research Publications*, 6(9), 624–630. <https://www.ijsrp.org>
- Smith, S. (2024). *NIP rents vehicles for N\$10m instead of buying them for N\$8m*. Windhoek: The Namibian.
- Taherdoost, H (2016) Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. Available at SSRN: <https://ssrn.com/abstract=3205040> or <http://dx.doi.org/10.2139/ssrn.3205040>
- Tang, Q., Pan, X., & Yan, Y. (2022). Lease financing and firm value under financial constraints: Evidence from Asia-Pacific markets. *Pacific-Basin Finance Journal*, 73, 101736.
- Tariq, M. U. (2025). Ensuring trustworthiness and rigor in qualitative research. In *Qualitative Inquiry in doctoral research: Pathways to effective design and implementation* (Chapter 12). IGI Global Scientific Publishing.
- Toyon, M. A. S. (2021). Explanatory sequential design of mixed methods research: Phases and challenges. *International Journal of Research in Business and Social Science* (2147- 4478), 10(5), 253–260. <https://doi.org/10.20525/ijrbs.v10i5.1262>
- Tunji, S. T., Augustine, D., Philips Olabode, O., & Solomon, O. (2022). Leases financing, liquidity, and return on equity of selected manufacturing companies in Nigeria: Implication of IFRS 16

leases. *International Journal of Accounting, Finance and Risk Management*, 7(2), 77–85.

<https://doi.org/10.11648/j.ijafrm.20220702.17>

Vatcheva, K., & Lee, M. (2016). Multicollinearity in regression analyses conducted in epidemiologic studies. *Epidemiology: Open Access*, 6(2). <https://doi.org/10.4172/2161-1165.1000227>

Venter, A., & Southgate, S. (2023). Financial performance analysis of PSEs in Namibia. *Journal of Business and Economic Research*, 28(1), 93–105.

Weylandt, M. (2016). SOE governance in Namibia: Will a hybrid system work? *Institute for Public Policy Research*. <https://ippr.org.na/>

Wooldridge, J. M. (2019). Introductory econometrics: A modern approach (7th ed.). *Cengage Learning*.

Wong, K., & Joshi, M. (2015). The impact of lease capitalisation on financial statements and key ratios: Evidence from Australia. *Pacific Accounting Review*, 27(3), 323–347.
<https://doi.org/10.1108/PAR-02-2014-0007>

Young, D. R., Kim, C., & McDonald, D. (2021). Financing nonprofit organizations. In W. W. Powell & P. Bromley (Eds.), *The nonprofit sector: A research handbook* (3rd ed., pp. 378–403). Stanford University Press.

Younus, S., & Sohail, H. M. (2021). Impact of growth opportunities, debt financing, corporate tax and profitability on lease propensity: A comparative study of small and large listed manufacturing companies of Pakistan. *Journal of Social and Organizational Research*, 1(2), 1–15.

Zaher, T. S. (2010). Performance of debt free firms. *Managerial Finance*, 36(6), 491-501.

<https://doi.org/10.1108/03074351011042973>

Zhang, S., & Liu, C. (2020). State ownership and the structuring of lease arrangements. *Journal of Corporate Finance*, 62. <https://doi.org/10.1016/j.jcorpfin.2020.101597>

APPENDICES

APPENDIX A: RESEARCH PERMISSION



NAMIBIA
UNIVERSITY
OF SCIENCE AND
TECHNOLOGY

HP-GSB
HAROLD PUPKEWITZ
Graduate School of Business

c/o Brahms and Haydn Streets
Private Bag 13388
Windhoek
NAMIBIA

T: +264 61 207 2809
F: +264 61 207 9809
E: hpgsb@nust.na
W: www.nust.na

06 December 2024

To Whom It May Concern:

PERMISSION TO CONDUCT RESEARCH AS PART OF THE REQUIREMENTS FOR THE AWARD OF MASTERS QUALIFICATION

The Master's qualification at Namibia University of Science and Technology (NUST) requires that all students undertake a practical research project. In this way, students are allowed to creatively link and discuss the theoretical aspects of the programme to the practical issues facing organisations in real-life settings. Typically, this project necessitates data gathering by questionnaires or interviews.

Franchia Menjono (215002180) has chosen to do a research project entitled: **Assessing the Influence of Lease Financing on the Financial Performance of Selected Public Sector Enterprises in Namibia**

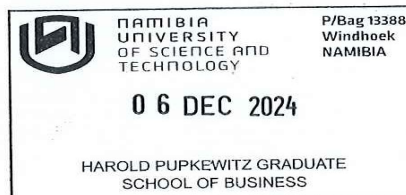
We appreciate your assistance in permitting access to your organisation for purposes of this research. Please be assured that all information gained from the research will be treated with the utmost circumspection. The student will adhere to principles of confidentiality and anonymity when reporting information about research participants.

I am available at any stage to answer any queries and/or discuss any aspect of this research project.

Thank you for your assistance in this request.

Sincerely

Sulaiman Olusegun Atiku, Ph.D.
Professor of Research
Harold Pupkewitz Graduate School of Business
Namibia University of Science and Technology
13 Jackson Kaujeua Street
Private Bag: 13388
Windhoek, Namibia
Email: satiku@nust.na
<https://orcid.org/0000-0001-9364-3774>



APPENDIX B: ONLINE QUESTIONNAIRE

Available at: <https://forms.gle/dhkh1LfddTUbj7cEA>

Section 1 of 6

Study on influence of lease financing on the financial performance of Public Sector Enterprises (PSEs) in Namibia

B *I* U  

Form description

INFORMED CONSENT

PROJECT TITLE: ASSESSING HOW LEASE FINANCING INFLUENCES THE FINANCIAL PERFORMANCE OF PUBLIC SECTOR ENTERPRISES (PSEs) IN NAMIBIA

Primary researcher: Mr Franchia Menjono (MBA student, Harold Pupkewitz Graduate School of Business (HPGSB)-NUST)

Supervisor: Prof Isaac Randa (NUST)

Dear Potential Research Participant,

With IFRS 16 now in effect for five years and ongoing discussions about the use of leases versus outright purchases or debt financing, known as the "Lease Puzzle", I am doing a study on the influence of lease financing on the financial performance of selected Public Sector Entities (PSEs). I kindly invite you to assist by completing this online questionnaire.

The study is guided by the following objectives:

The main objective

The main objective of the study is to assess the influence of lease financing on financial performance of

APPENDIX C: REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT PSES

Franchia Menjono (Mr)

Box 8490, Bachbrecht, Windhoek, fwmenjono@email.com, 0811223829

Monday, 20 January 2025

Chief Executive Officer

Namibia Institute of Pathology Limited (NIP)
Windhoek

Subject: Request for Permission to Conduct Research at NIP

Dear Sir/Madam

I hope this letter finds you well. My name is Franchia Menjono and I am currently pursuing a Master of Business Administration (MBA) degree at the Namibia University of Science and Technology (NUST). As part of my academic program, I am conducting research titled "**The Influence of Lease Financing on the Financial Performance of Selected Public Sector Enterprises.**"

The study seeks to assess the impact of lease financing on financial performance within public sector enterprises and involves collecting both quantitative and qualitative data. For the qualitative component, I am seeking the participation of senior employees within your organization, specifically those involved in asset acquisition, budgeting, financial accounting, or the Procurement Management Unit (PMU).

I am kindly requesting permission to conduct this research at NIP and to engage with at least two senior employees who meet the criteria mentioned above. The participation will involve completing a brief online questionnaire attached hereto, which is accessible via the following link: <https://forms.gle/i4GMTYPhtGtW5rXi8>.

Attached to this letter is the official study approval letter from NUST for your reference. I assure you that all responses will be treated with the highest level of confidentiality and used solely for academic purposes.

Should you require further details or have any questions, please do not hesitate to contact me at fwmenjono@email.com or 0811223829. I sincerely hope for your support in this academic endeavour.

Thank you for considering my request.

Kind regards,



Franchia Menjono

MBA Candidate

Namibia University of Science and Technology (NUST)

APPENDIX D: PERMISSION BY PSES TO CONDUCT RESEARCH

Enquiries: Albert Khehare
Tel: +26461 204 5033
Email: Akhehare@namcor.com.na



25 January 2025

Mr. Franchia Menjono
University of Science and Technology
Namibia
P/Bag 13388
Windhoek, Namibia

Dear Mr. Menjono,

RE: Approval to conduct your research at the National Petroleum Corporation of Namibia (NAMCOR)

Your request to conduct your research project at NAMCOR has been approved.

We believe that your topic is indeed relevant to us and that it would add value to our business. Also, I would like to request you to share your findings at the end of your research with our Human Capital Development team.

This approval is only limited to the research topic below as indicated in your request.
"The Influence of Lease Financing on the Financial Performance of Selected Public Sector Enterprises."

NAMCOR herewith approves the topic for research and academic purposes only. Also, you will be required to sign a Non-Disclose Agreement before commencement of your research.

Should you have any queries, please do not hesitate to contact Mr. Albert Khehare at +264 61 204 5033 or Akhehare@namcor.com.na.

I trust you find the above in order.

Yours Sincerely,



Mr. Ebson Uanguta
Interim Managing Director



Approval to conduct your research at the National Petroleum Corporation of Namibia (NAMCOR)

National Petroleum Corporation of Namibia Pty Ltd

1 Aviation Road, Petroleum House,
Private Bag 13196, Windhoek, Namibia.

T +264 61 204 5000 **F** +264 61 204 5061/30/92 **E** info@namcor.com.na,



Corporate Communications and Public Relations
Head Office, 9 Judge JP Karuaine Street
PO Box 297, Windhoek, Namibia
Tel: (+264 61) 201 2484
Fax: (+264 61) 201 2074
E-mail: CommPR@telecom.na
Website: www.telecom.na

26 February 2025

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF AUTHORISATION TO CONDUCT RESEARCH

This letter serves as authorisation to Mr Franchia Menjono to conduct the research project titled: "The Influence of Lease Financing on the Financial Performance of Selected Public Sector Enterprises." *A case study of Telecom Namibia*.

Upon review of the request by the student, we are glad to offer him the opportunity to conduct his research at our organisation. All interviews, surveys, observations around the business and the distribution of questionnaires will be duly overseen by the researcher himself.

If you have any concerns or require additional information, please contact the Corporate Communication and Public Relations Department.

Yours sincerely,

A handwritten signature in black ink, appearing to read "N. Kondombole-Kambinda".

N. KONDOMBOLE-KAMBINDA
HEAD: CORPORATE COMMUNICATIONS AND PUBLIC RELATIONS

Directors: Mr. Mokuobek Uupendi (Chairperson), Ms. Amanda Hausanga (Deputy Chairperson)
Mr. Rowan Kleintjes, Mr. Fernando Soroob, Ms. Mokuobek Uupendi
Chief Executive Officer: Dr. Stanley Shanshinda
Acting Company Secretary: Ms. Buneca Hangua
Reg. No. 90/282