

The Impact of Operating and Financial Leases on Company Asset Risk: Evidence from BMW Group Alphabet

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

THE IMPACT OF OPERATING AND FINANCIAL LEASES ON COMPANY ASSET RISK: EVIDENCE FROM BMW GROUP ALPHABET

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This study examines the impact of operating leases and financial leases on company asset risk within BMW Group, particularly through its subsidiary Alphabet, in the automotive fleet leasing industry. The research focuses on asset risk measured through residual value exposure and depreciation uncertainty, especially following the implementation of IFRS 16, which requires leased assets to be recognized on the balance sheet. The study adopts a quantitative research approach using primary panel data collected from BMW Group between 2020 and 2025. Data were analyzed using regression analysis through EViews to examine the relationship between lease structures and company asset risk.

The findings show that operating leases have a positive and significant impact on company asset risk because the lessor retains ownership and residual value exposure, increasing uncertainty related to depreciation and future resale value. Meanwhile, financial leases help reduce company asset risk by transferring ownership-related risks and responsibilities to the lessee, thereby lowering residual value uncertainty for the company. The regression results indicate that both lease structures significantly influence company asset risk and explain a substantial proportion of asset risk variation.

Keyword: Operating Lease, Financial Lease, Residual Value, Asset Risk, Leasing, Fleet Management, Lease Structure, Risk Management



DEDICATION

This thesis is dedicated to my parents and my advisor for their endless encouragement, guidance, and continuous support throughout the completion of this thesis journey.



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CHAPTER 3 - RESEARCH METHODOLOGY

3.1 Research Design

The research adopts a quantitative research design to analyse the effect of operating and financial lease structures on company asset risk in the automotive fleet leasing industry. Specifically, the research focuses on how different lease models influence asset risk, particularly in terms of residual value and depreciation uncertainty, in the context of BMW Group and its subsidiary Alphabet. The quantitative approach allows a structured testing of the relationships between lease structures and asset risk, providing empirical evidence on how these variables interact in leasing-intensive businesses. Quantitative research is a structured approach that involves gathering and studying numerical data to identify relationships among variables and evaluate hypotheses through statistical analysis (Garba, 2023). The study focuses exclusively on numerical data collected through primary sources, using structured questionnaires to measure perceptions and practices related to leasing and asset risk. Statistical techniques will be applied to quantify relationships and test the proposed hypotheses. By using primary data, this study captures real-world managerial perspectives while maintaining a structured and objective approach to analysis.

3.2 Population and Sampling

The target population for my thesis are the financial and operational data related to leasing activities within BMW Group, particularly through its subsidiary Alphabet (BMW Group subsidiary), which operates in the automotive fleet leasing industry. The study focuses on company-level data related to lease structures, asset values, and financial performance, as these are relevant to analysing asset risk in terms of residual value and depreciation.

This study uses panel data methodology, which uses both cross-sectional and time-series data to examine asset variations over different periods. Panel data (or longitudinal data) refer to datasets that follow the same individuals over time, providing multiple observations for each unit (Hsiao,2022). Panel data allows for a deeper understanding of the relationship between lease structures and asset risk by capturing both individual asset characteristics and changes over the study period. This approach helps improve the accuracy and reliability of the analysis. The study only focuses on numerical data and uses statistical methods to measure relationships between variables and identify causal effects.