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Financial Leasing and the Profitability of Transport Companies: The Moderating Role of Subsectors

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ABSTRACT

This study evaluates the impact of financial leasing on the profitability of transport companies globally. Data were collected from 2008 to 2025 and analysed using a fixed-effects (FE) panel data model estimated via the Driscoll-Kraay method. The results demonstrate that financial leasing reduces ROE, as fixed payment obligations and financial costs arising from lease contracts exacerbate the burden of debt servicing. Interaction variables indicate that the magnitude of financial leasing's impact varies compared to the baseline sector. Notably, in the maritime transport sector, a positive and statistically significant interaction coefficient shows that the adverse impact of financial leasing is considerably mitigated and may even shift in a positive direction. This implies that, compared to the baseline sector, companies in this subsector possess a superior capacity to absorb financial leasing, owing to the nature of their long-term assets and more stable cash flows. Several policy implications are suggested, including the need for companies to exercise caution in their asset financing strategies via financial leasing, coupled with a comprehensive assessment of operational efficiency, projected cash flows, and financial risk tolerance.

Keywords: Financial leasing, Profitability, Transport, ROE.

Introduction

Any company operating within the economy engages in debt mobilisation in one form or another (D'Mello & Miranda, 2010; Du *et al.*, 2022; Anh *et al.*, 2026a). Consequently, numerous propositions have been made regarding the use of debt: Does it impact corporate profitability? The M&M theory by Modigliani and Miller (1958), agency theory by Jensen and Meckling (1976), and pecking order theory by Myers and Majluf (1984) offer different mechanisms for prioritising debt over equity, generally indicating that utilising debt assists companies in alleviating cash flow management pressures or enhancing investment capacity, thereby ultimately increasing profitability (Eriksson *et al.*, 2023; Gomez *et al.*, 2023; Pinto & Sousa, 2023; Scott *et al.*, 2023; Feng *et al.*, 2024; Karimov & Rakhimova, 2024; Prakash & Desai, 2024; Saleh *et al.*, 2024).

Among corporate financing methods, financial leasing has emerged prominently. This method aids companies in reducing the pressure of proving collateral and servicing short-term debt, while increasing corporate assets or serving as an alternative to bank financing (Xie & Lin, 2025). Transport companies frequently employ financial leasing as a strategy to minimise cash outflows, reduce the cost of debt, and improve liquidity, creating optimal benefits (Chrysafis *et al.*, 2024; Bulckaert *et al.*, 2026).

Although theoretical frameworks, such as agency theory, focus on the premise that borrowing has a positive impact on corporate profitability (Jensen & Meckling, 1976, 2019), the perspective may differ within the transport sector. This is an industry typically characterised by substantial fixed assets, thus demanding high financing needs.

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Consequently, leasing is a suitable choice, with financially leased assets accounting for a large proportion (Jiao, 2022). However, a key question raised by these studies is, does financial leasing genuinely increase the profitability of these companies? If a company leases assets at a low proportion, these debt obligations will initially help increase its ROA; however, this indicator may subsequently decline rapidly (Berber Narin & Akpınar, 2026). The root cause stems from the non-cancellable nature of financial lease assets and the emergence of new transport modes, which diminish the asset utilisation efficiency of companies (Slater *et al.*, 2024). Furthermore, some studies suspect that excessive financial leasing will reduce a company's ability to access other debt capital, because excessively high financial leverage easily leads to financial distress or a lack of interest from banks (Ramirez-Orellana *et al.*, 2025).

Another concern raised by the study is if different enterprises within subsectors (maritime transport, air transport, road transport, and rail transport) enhance or alleviate the aforementioned effects. In other words, do subsectors serve as moderating variables? As a result, this study focuses on answering two questions: (1) Does financial leasing have a detrimental impact on the profitability of transportation companies? (2) Can subsectors in the transportation business act as moderators? To address these questions, data were gathered from listed firms worldwide and retrieved from S&P Global. The results support agency theory (Jensen & Meckling, 2019) and pecking order theory (Myers & Majluf, 1984) by showing that financial leasing is not the best way to increase profitability. They also offer more evidence about corporate debt usage from the viewpoint that using debt is not always advantageous. Additionally, industrial associations function as moderating factors.

Regarding the structure of this study, following the Introduction in Section 1, Section 2 will present the Literature Review and hypothesis development, Section 3 outlines the Research Methodology, and Section 4 details the Research Results and discussion. The final section will provide the conclusion and policy implications.

Literature Review and Hypothesis Development

Financial Leasing and the Profitability of Transport Companies

Financial leasing is a type of asset leasing in which the lessor passes most of the risks and rewards associated with asset ownership to the lessee. Ownership of the asset may be transferred at the conclusion of the lease term. According to the International Financial Reporting Standards framework, specifically IFRS 16, a financial lease arrangement causes the lessee to recognize a right-of-use asset and a lease obligation on the balance sheet. Financial leasing is considered an alternate financing strategy to traditional borrowing, allowing organizations to access and use assets for production and business operations without needing to discharge the whole initial investment value (Hoffman & Strezhnev, 2022). Through changes in the denominator (total assets) and associated financial costs (depreciation and interest charges), this structure modifies both the asset scale and debt obligations, which can later affect financial ratios and profitability (e.g., ROA, ROE) (Li & Venkatachalam, 2024).

Transport companies are understood as economic organisations operating in the provision of passenger or freight transport services through various transport modes, including road, rail, water, and air (Park *et al.*, 2020). Companies in this sector typically possess a specific cost structure with a large proportion of fixed costs, high operating leverage, and significant asset financing needs, making decisions regarding capital structure, risk management, and the choice of financing forms (e.g., borrowing or financial leasing) central issues in analysing efficiency and profitability (Kaplan *et al.*, 2025).

Profitability reflects a company's capacity to generate profit from the economic resources it controls, including assets, equity, and revenue (Nguyen Thi *et al.*, 2025; Anh *et al.*, 2026b), and is measured via accounting profit-based financial indicators. This study utilises ROE as the metric to evaluate the profitability of transport companies, as it represents the ability to generate returns for shareholders (Li & Venkatachalam, 2024; Xie & Lin, 2025).

Hypothesis Development

Agency theory posits that the use of debt creates obligations to service interest and principal (Jensen & Meckling, 2019), thereby restricting overinvestment or underinvestment by necessitating careful consideration of how borrowed funds are utilised to purchase assets. The pecking order theory, while mentioning the preference for using equity, also determines that using debt benefits from a tax shield, thereby increasing profitability—that is, increasing ROE (Hart



et al., 1997). And for this very reason, banks will prefer to finance this group of companies with more preferential interest rates and longer terms (Du *et al.*, 2022). Thus, these theories form the foundation to explain the impact of using financial leverage on corporate profitability.

However, there are also doubts regarding the aforementioned theories – stemming from the transport sector itself. This is an industry with a significantly higher proportion of fixed assets compared to others and also requires substantial capital to finance equipment, hence financial leverage in this sector is typically higher than in other industries (Jiao, 2022; Xie & Lin, 2025). Researchers argue that excessively high debt usage can give rise to new conflicts of interest between shareholders and creditors, leading to behaviours such as risk-shifting or underinvestment, thereby increasing agency costs and potentially impairing ROE (Morgado & Pindado, 2003; Nguyen & Nguyen, 2021; Ahmed *et al.*, 2023).

Financial leasing – fundamentally also a form of borrowing – confronts transport companies with several issues. Firstly, financially leased assets are highly specialised, meaning they can almost exclusively be used for a single purpose within the transport sector. Transfers may occur, but typically only among companies within specific subsectors (maritime, road, air, or rail). Secondly, the lessee must retain the asset for at least two-thirds of the depreciation period, and the lease is non-cancellable (Merrill, 2020; Hoffman & Strezhnev, 2022). If leased assets are not managed effectively, the profitability of transport companies will decline. Another aspect to consider: when increasing borrowing capacity through various methods, including financial leasing, companies will face the issue of increased cost of capital, thereby reducing or eroding profits (Yeo, 2016; Jang & Ahn, 2021). Studies based on contract theory show that when debt levels become excessively high, amidst rapidly changing market conditions, debt servicing costs will increase (Muttakin *et al.*, 2020; Du *et al.*, 2022), leading to decreased profits. Meanwhile, financial leasing increases liabilities, thereby increasing total capital, leading to a decrease in ROE due to a decreased numerator and an increased denominator.

Therefore, the proposed research hypothesis is:

H1: Financial leasing reduces the profitability of transport companies.

Within the transport industry, there are 4 subsectors. The specific asset structure and operating leverage of each subsector act as a moderator of the effectiveness of these lease contracts. Capital-intensive sectors such as aviation and maritime transport require massive amounts of capital to maintain fleets and ocean-going vessels. For this group, a high proportion of financial lease debt—especially when forced to fully capitalise it on the balance sheet under IFRS 16—creates a rigid burden of interest and depreciation expenses, leading to an amplified negative impact on net profit when revenue shocks occur (Slater *et al.*, 2024). Conversely, the road transport subsector possesses a more flexible asset structure (asset-light) and a rapid capital turnover, allowing for more dynamic use of lease leverage for motor vehicles, thereby minimising the erosion of profit margins (Satrio *et al.*, 2024). Therefore:

H2: Subsector characteristics (road, water, air, rail) act as a moderating variable on the direction of financial leasing's impact on corporate profitability.

Materials and Methods

Data Processing Method

The dataset in this paper comprises 45 transport companies during the 2008–2025 period. This is panel data featuring a spatial dimension encompassing companies from multiple countries and a relatively long temporal dimension. Given the multinational nature, the likelihood of unobserved fixed heterogeneity among companies is very high. If these unobserved factors correlate with the explanatory variables in the model, using Pooled Ordinary Least Squares (POLS) can lead to omitted variable bias, rendering the estimated coefficients inconsistent (Wooldridge, 2010). Hence, panel data models such as Fixed Effects (FE) and Random Effects (RE) are frequently applied to control for individual heterogeneity and enhance the reliability of the results (Ali *et al.*, 2023; Eriksson *et al.*, 2023; Mitchell *et al.*, 2023; Muresan *et al.*, 2023; Srisawat *et al.*, 2023; Tadesse *et al.*, 2023; Iriti *et al.*, 2024; Lan *et al.*, 2024; Patel *et al.*, 2024; Tan *et al.*, 2024).

For multinational data, cross-sectional dependence often emerges due to global economic shocks such as financial crises, fuel price fluctuations, or shifts in international monetary policy. Should cross-sectional dependence and



autocorrelation exist, standard errors from standard FE and RE models may exaggerate the statistical significance of estimated coefficients and distort statistical tests (Kilian, 2006). Thus, the Driscoll–Kraay standard error method proposed by Driscoll and Kraay (1998) is deemed appropriate, as it yields robust standard error estimates against heteroskedasticity, autocorrelation, and cross-sectional dependence when the number of time units is medium to large. Furthermore, to control for potential endogeneity and dynamic elements in the relationship between financial structure and profitability, the study subsequently employs the System GMM method. This method concurrently addresses endogeneity, omitted variable bias, and the dynamic dependence of the dependent variable by utilising lagged variables as instruments. The combination of the FE Driscoll–Kraay model and System GMM ensures the consistency and reliability of empirical results within the context of multinational corporate panel data.

In this study, alongside traditional explanatory variables, the author expands the model by introducing interaction variables between financial leasing and sectors to test for differences in the impact of financial leasing across subsectors within the transport industry. Specifically, the sector variable is categorised into four groups, wherein the air transport sector is selected as the baseline group and is not directly included in the model to avoid perfect multicollinearity. The interaction variables are constructed by multiplying the financial leasing variable by the corresponding sector dummy variables, allowing the coefficient of the financial leasing variable to vary by subsector, thereby reflecting heterogeneous effects across industries.

Variables

The control variables in the model include:

Bank debt: typically has a negative impact on profitability (D’Mello & Miranda, 2010; Ratajczak & Mikołajewicz, 2021; Wang *et al.*, 2024). The mechanism of this issue is manifested in the aspect that when a company's borrowing is excessively high, creditors will have to weigh future financing, causing the ability to access new capital to decline, cost of capital to rise, and ROE to decrease (Russell *et al.*, 2020; Hu *et al.*, 2021).

Cash held by the company may have a positive or negative impact on corporate ROE (Wang, 2019; Chaklader & Padmapriya, 2021). For transport companies, due to high debt issues, it is necessary to maintain more cash to ensure solvency, and therefore, it often positively affects profitability.

Operating expenses account for a large proportion of the cost structure and are closely linked to the degree of asset exploitation (Rodrigues *et al.*, 2008; Jiao, 2022). When transport demand rises, companies are forced to increase operating frequency, expand vehicle fleets, or upgrade exploitation systems, resulting in increased operating expenses. However, this increase is often accompanied by increased revenue and improved asset turnover, which can subsequently enhance profitability.

Equity has a positive impact on the profitability of transport companies (Gompers *et al.*, 2003). Creditors will also feel more secure when financing companies with high equity (Merrill, 2020; Russell *et al.*, 2020). This also acts as a cushion to help companies withstand economic shocks such as trade wars, pandemics, or embargoes (Hu *et al.*, 2021; Fan *et al.*, 2022; Li & Venkatachalam, 2024).

The variables used in the paper are presented in **Table 1**. Data were processed using STATA 17.

Table 1. Variables in the model.

Variable	Notation	Obs.	Mean	Std. Dev.	Min	Max
Profitability	roe	810	7,892	8,647	-42,180	53,012
Leasing	lease	810	15,645	21,773	0,000	90,754
Leasing in road transport	lease_ind2	810	5,454	15,606	0,000	90,076
Leasing in rail transport	lease_ind3	810	0,764	6,520	0,000	88,646
Leasing in maritime transport and port services	lease_ind4	810	3,561	11,444	0,000	89,208
Logarithm of Bank debt	lgdebt	810	11,995	1,904	3,913	16,613
Logarithm of Cash	lgcash	810	10,944	1,911	5,465	16,286
Logarithm of Operating expenses	lgoperating_expense	810	13,469	1,654	9,745	17,749



Logarithm of Total equity	lgtotal_equity	810	12,812	1,695	9,130	17,990
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Source: Authors' calculation

The results in **Table 1** indicate that the profitability variable (ROE) shows significant fluctuation in operational efficiency among companies. The minimum value of ROE is -42.180%, and the maximum reaches 53.012%, indicating a strong divergence in profitability, reflecting differences in management capacity and market conditions among companies in the transport sector.

The interaction variables between financial leasing and sectors reveal that the extent of financial leasing usage is heterogeneous across subsectors. Specifically, the financial leasing variable in the road transport sector has an average value of 5.454%, which is significantly higher than that in rail transport (0.764%) and maritime transport and port services (3.561%). This reflects differences in asset structure and financing needs among sectors, wherein road transport tends to utilise financial leasing more heavily, while rail transport uses it to a lesser extent.

Results and Discussion

Table 2 presents the Pearson correlation coefficient matrix among the variables in the research model for the sample of transport companies on a global scale. The results show that the relationships between variables generally align with the financial structure characteristics of a capital-intensive industry heavily reliant on fixed assets such as transport vehicles, ocean vessels, aircraft, and logistics infrastructure.

The interaction variables between financial leasing and sectors show a positive correlation with the lease variable. Lease_ind2 has a relatively high correlation ($r = 0.553$, $p < 0.01$), indicating a higher concentration of financial leasing usage in specific subsectors, particularly road transport. Interaction variables between sectors, on the other hand, have low or statistically negligible correlation coefficients, indicating that subsectors in the study sample are very well defined.

Table 2. Correlation coefficient matrix

	lease	lease_ind2	lease_ind3	lease_ind4	lgdebt	lgcash	lgoperat~e	lgtotal~y	roe
lease	1.0000								
lease_ind2	0.5530	1.0000							
	0.0000								
lease_ind3	0.2192	-0.0410	1.0000						
	0.0000	0.2438							
lease_ind4	0.3527	-0.1089	-0.0365	1.0000					
	0.0000	0.0019	0.2994						
lgdebt	-0.3358	-0.2094	0.0298	-0.2444	1.0000				
	0.0000	0.0000	0.3973	0.0000					
lgcash	0.0594	-0.0765	0.1597	0.0789	0.6580	1.0000			
	0.0913	0.0296	0.0000	0.0248	0.0000				
lgoperat~e	0.0407	-0.0780	0.1544	-0.0266	0.7617	0.8820	1.0000		
	0.2472	0.0263	0.0000	0.4501	0.0000	0.0000			
lgtotal~y	0.0125	-0.1254	0.0848	0.0344	0.7486	0.8998	0.9290	1.0000	
	0.7223	0.0003	0.0157	0.3284	0.0000	0.0000	0.0000		
roe	0.0936	0.0414	-0.0513	0.0802	0.1125	0.1769	0.2245	0.1869	1.0000
	0.0077	0.2387	0.1446	0.0224	0.0013	0.0000	0.0000	0.0000	

Source: Authors' calculation



The VIF values are all below the threshold of 10 (**Table 3**), indicating that multicollinearity does not severely impact the reliability of the estimates.

Table 3. Variance Inflation Factor test

Variables	VIF
lgtotal_equity	9.50
lgoperating_expense	8.63
lgcash	6.12
lgdebt	3.84
lease	2.70
lease_ind2	1.91
lease_ind3	1.54
lease_ind4	1.23
Mean VIF	4.43

Source: Authors' calculation

Table 4 presents the results of model selection tests amongst POLS, RE, and FE in panel data analysis. The F-test yields a p-value = 0.0000, allowing for the rejection of the null hypothesis (H_0) that all individual effects are zero. In other words, unobserved heterogeneity exists among the companies in the study sample. The LM test yields a p-value = 0.0000, rejecting the H_0 that the variance of the individual effect is zero. The Hausman test yields a p-value = 0.0328 (< 0.05), rejecting the H_0 that individual errors are uncorrelated with the explanatory variables. Therefore, in this case, the FE model is the preferred choice.

Table 4. Model selection test results

Model selection test	Chi2 (P-value)	POLS	FE	RE
F test	7,92 (0,0000)		Reject H_0 Select FE	
LM test	418,78 (0,0000)			Reject H_0 Select RE
Hausman test	16,75 (0,0328)		Reject H_0 Select FE	
Conclusion			Select FE	

Source: Authors' calculation

The Modified Wald test results in **Table 5** yield a p-value of 0.0000, indicating the presence of heteroskedasticity amongst companies in the FE model. The Wooldridge test also returns a p-value of 0.0000, signifying the existence of first-order autocorrelation in the residuals. Concurrently, the Pesaran CD test yields a p-value of 0.0000, confirming the presence of cross-sectional dependence among the sampled companies.

Table 5. Post-estimation test results for the FE model

Post-estimation test for model	P-value	Conclusion
Modified Wald test	0.0000	Presence of heteroskedasticity
Wooldridge test	0.0000	Presence of autocorrelation
Pesaran's CD test	0.0000	Presence of cross-sectional dependence

Source: Authors' calculation

The results from the FE Driscoll–Kraay model reveal that the overall financial leasing variable possesses a negative coefficient (-0.057) and is statistically significant at the 1% level. It is necessary to clarify that this coefficient reflects the impact of financial leasing within the baseline sector, specifically the air transport company group. This indicates



that within the baseline sector group, an increased reliance on financial leasing tends to diminish profitability, likely due to the pressure of financial costs and fixed long-term payment obligations.

A notable point in the model is the heterogeneous impact of financial leasing across subsectors. Specifically, the interaction variable between financial leasing and the maritime transport sector has a positive coefficient of 0.111 and is statistically significant at the 5% level. This suggests that the impact of financial leasing in the maritime transport sector differs significantly from the baseline aviation transport sector. When combined with the negative coefficient of the overall financial leasing variable, it can be observed that in the maritime transport sector, the adverse impact of financial leasing is considerably offset and may even shift towards a positive direction.

Consequently, it is evident that FE Driscoll-Kraay is the most suitable model among the static models utilised in the study (**Table 6**). Compared to POLS, this model successfully eliminates bias caused by ignoring individual effects; compared to standard FE and RE, FE Driscoll-Kraay provides more reliable standard errors in the context of data exhibiting simultaneous heteroskedasticity, autocorrelation, and cross-sectional dependence. Therefore, the results from FE Driscoll-Kraay are deemed the primary basis for interpreting economic impacts within the static regression framework.

Table 6. Estimation results of POLS, RE, FE, FE Driscoll-Kraay, and SGMM

	(1)	(2)	(3)	(4)	(5)
	POLS	FE	RE	FE-DK	SGMM
lease	0.018 (0.029)	-0.057** (0.026)	-0.050** (0.024)	-0.057*** (0.019)	-0.065 (0.062)
lease_ind2	0.011 (0.030)	0.086* (0.044)	0.065* (0.037)	0.086 (0.063)	0.099 (0.059)
lease_ind3	-0.145* (0.075)	-0.051 (0.061)	-0.048 (0.057)	-0.051 (0.100)	-0.045 (0.100)
lease_ind4	0.053 (0.048)	0.111** (0.046)	0.102** (0.041)	0.111** (0.052)	0.053 (0.118)
lgdebt	-0.289 (0.265)	-2.084*** (0.479)	-1.418*** (0.410)	-2.084** (0.955)	-1.712 (2.192)
lgcash	-0.298 (0.489)	0.124 (0.529)	-0.176 (0.481)	0.124 (0.860)	-0.634 (1.736)
lgoperating_expense	2.610*** (0.610)	2.851** (1.276)	3.393*** (0.884)	2.851 (3.281)	0.729 (2.235)
lgtotal_equity	-0.823* (0.491)	-2.169** (1.001)	-1.072 (0.813)	-2.169 (1.537)	4.354** (1.974)
L.roe					0.393*** (0.105)
Cons_	-10.409*** (3.067)	20.972* (12.594)	-5.045 (5.597)	20.972 (26.831)	-33.181 (25.000)
Observations	810	810	810	810	765
P-value AR(1)					0.002



P-value AR(2)	0.661
P-value Hansen	0.538

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Authors' calculation

More notably, when controlling for endogeneity and dynamic factors using System GMM, the overall financial leasing variable no longer retains statistical significance. The interaction variables by sector also lose their statistical significance. This implies that the negative impact of financial leasing observed in the FE Driscoll–Kraay model may not fully reflect a robust causal relationship but might partially stem from endogenous factors or the dynamics of ROE. In other words, within the static model, financial leasing appears to influence profitability; however, when introducing the lagged variable of ROE and addressing endogeneity, this effect becomes less robust statistically.

Synthesising the findings reveals that the two sets of models provide two complementary layers of information. The FE Driscoll–Kraay model allows for the identification of statistically significant relationships after fully adjusting for the deficiencies of static panel data. In this study, financial leasing has a negative impact on ROE, while the impact of financial leasing varies across subsectors, particularly within maritime transport. Conversely, the System GMM model demonstrates that when addressing endogeneity and incorporating dynamic elements, ROE exhibits high persistence over time, while the impact of financial leasing fails to maintain statistical significance.

In terms of choosing the best model, this study views FE Driscoll–Kraay as the main model in the results section since it directly supports the goal of impact analysis using static panel data with cross-sectional dependence and permits a clear interpretation of heterogeneous effects by sector. The System GMM results, however, are used as an important robustness check, offering an additional dynamic perspective and warning that the impact of financial leasing might not be fully resilient when endogeneity is taken into account. The study's final conclusion should therefore be regarded cautiously: financial leasing may reduce profitability in the error-adjusted static model, but evidence of a strong causal influence wanes when endogeneity and dynamic factors are taken into account.

From the entirety of the empirical findings, three main points can be drawn. Firstly, in suitably adjusted static models, financial leasing exerts a negative impact on the profitability of transport companies. Secondly, the impact of financial leasing is not homogeneous across subsectors. Interaction variables indicate that the magnitude of financial leasing's effect differs from that in the baseline sector. Notably, in maritime transport, the positive and statistically significant interaction coefficient suggests that the adverse impact of financial leasing is substantially alleviated, potentially shifting to a positive trajectory. This implies that compared to the baseline sector, companies in this subsector possess a superior capacity to absorb financial leasing due to the nature of long-term assets and more stable cash flows. Conversely, for the remaining sectors, sufficiently strong statistical evidence of divergence from the baseline sector was not found, indicating that the impact of financial leasing in these sectors does not differ significantly from the aviation transport group. Thirdly, when considering the endogeneity and dynamic nature of profitability via the System GMM model, the impact of financial leasing loses statistical significance. This result suggests that the negative relationship observed in the static model primarily reflects short-term characteristics or is influenced by endogenous factors. Furthermore, the lagged variable of ROE possesses a highly significant positive coefficient, demonstrating that profitability is persistent over time. Additionally, equity emerges as a significant factor in the dynamic model, highlighting the pivotal role of internal financial capacity relative to external financing decisions.

Thus, the research findings propose that the influence of financial leasing on profitability is a complex issue, contingent upon model specification, industry characteristics, and the degree of endogeneity control. This also implies that transport companies should not view financial leasing as a financing tool with a uniform impact in all scenarios, but rather carefully consider the asset structure, cash flows, and financial risk tolerance of each specific subsector.

Conclusion

This study evaluates the negative impact of financial leasing on the profitability (ROE) of transport companies globally over the 2008–2025 period. These findings complement agency theory by Jensen and Meckling (2019) and pecking order theory by Myers and Majluf (1984) in explaining the negative impact of financial leasing in particular and debt



usage in general on the business performance of highly leveraged companies. Additionally, companies in the maritime transport sector stand to benefit more from the utilisation of financial leasing.

Policy Implications

From a corporate governance perspective, these findings suggest that transport companies must exercise caution in their asset financing strategies via financial leasing. Fleet expansion or asset investment should be accompanied by a comprehensive evaluation of operational efficiency, projected cash flows, and financial risk tolerance. Rather than treating financial leasing as a default financing solution, companies need to consider optimising their debt structure, flexibly combining traditional borrowing, internal capital, and various leasing forms to minimise adverse impacts on return on equity.

Banks and financial leasing companies should strengthen their credit risk assessments for transport companies, particularly concerning high-value and long-term lease contracts. Designing more flexible lease products, tethered to asset operational performance or business cycles, could alleviate fixed cost pressures on companies. Concurrently, regulatory bodies could consider support policies to enhance operational efficiency, financial information transparency, and risk governance, thereby assisting companies in leveraging the benefits of financial leasing without impairing profitability.

Limitations and Dimensions for Future Research

This study acknowledges the following limitations. Firstly, the transport sector includes many environmentally friendly companies, which will attract more financing from banks (Khuc *et al.*, 2022). This will create a discrepancy in reducing corporate costs and mitigating the negative impact of financial leasing on ROE. Secondly, although the FE model has controlled for time-invariant company-specific factors and minimised endogeneity due to time-invariant omitted variables, and Driscoll–Kraay standard errors have controlled for cross-sectional dependence and common shocks, macroeconomic control variables such as GDP growth, interest rates, and inflation have not been investigated. We will incorporate these variables in the future, as well as employ instrumental variables to thoroughly address dynamic endogeneity.

Declaration of Generative AI and AI-Assisted Technologies in the Manuscript Preparation Process

During the preparation of this work the authors used Gemini and ChatGPT in order to proofread and improve the readability of the manuscript. After using these tools/services, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

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