Business Review and Case Studies, Vol. 5 No. 1, April 2024
Permalink/DOI: http://dx.doi.org/10.17358/brcs.5.1.58
Available online at http://journal.ipb.ac.id/index.php/brcs

EISSN: 2721-6926

CAPITAL STRUCTURE AND ITS IMPACT ON FIRM FINANCIAL PERFORMANCE IN THE TRANSPORTATION AND LOGISTIC SECTOR

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Abstract: Capital structure was a structure that contained a combination of debt and company capital to support operational activities, so this was a concern for company management, including companies in the transportation and logistics sector. Transportation and logistics sector companies had an important role in the country's economy in that they moved goods or passengers from one place to another. However, there were companies in the transportation and logistics sector that had high levels of debt but could record profits, while there were companies that had low levels of debt but suffered losses. Therefore, the aim of this research was to describe the dynamics of capital structure and financial performance and analyze the influence of capital structure on the financial performance of companies in the transportation and logistics sector. This study used 18 samples of transportation and logistics sector companies using purposive sampling technique. The analytical method used was descriptive analysis and panel data regression. The results of this research showed that capital structure as proxied by the level of debt (Debt to Assets Ratio (DAR), Debt to Equity Ratio (DER), Short Term Debt (STD)) had a negative influence on the company's financial performance as proxied by the Return On Assets (ROA) ratio. Meanwhile, the effect of capital structure proxied by retained earnings variable had a positive effect on ROA.

Keywords: capital structure, debt ratio, financial performance, retained earnings, transportation and logistics sector

Abstrak: *Struktur modal merupakan struktur yang berisikan kombinasi hutang dan modal perusahaan dalam mendukung kegiatan operasional sehingga hal ini menjadi perhatian bagi manajemen perusahaan tak terkecuali perusahaan sektor transportasi dan logistik. Perusahaan sektor transportasi dan logistik memiliki peran penting bagi perekonomian negara yang memiliki peran sebagai pihak yang memindahkan barang atau penumpang dari suatu tempat ke tempat lainnya. Tetapi, terdapat perusahaan sektor transportasi dan logistik yang memiliki tingkat hutang tinggi tetapi dapat mencatatkan keuntungan, sedangkan ada perusahaan yang memiliki tingkat hutang rendah tetapi mengalami kerugian. Oleh sebab itu, tujuan dari penelitian ini adalah menggambarkan dinamika struktur modal dan kinerja keuangan serta menganalisis pengaruh struktur modal terhadap kinerja keuangan perusahaan sektor transportasi dan logistik. Penelitian ini menggunakan 18 sampel penelitian perusahaan sektor transportasi dan logistik dengan teknik pengambilan sampel purposive sampling. Metode analisis yang digunakan adalah analisis deskriptif dan regresi data panel. Hasil penelitian ini adalah menunjukkan bahwa struktur modal yang diproksikan tingkat hutang (Debt to Assets Ratio (DAR), Debt to Equity. Ratio (DER), Short Term Debt (STD)) memiliki pengaruh negatif terhadap kinerja keuangan perusahaan yang diproksikan rasio Return On Assets (ROA). Sedangkan, pengaruh struktur modal yang diproksikan variabel laba ditahan memiliki pengaruh positif terhadap ROA.*

Kata kunci: *struktur modal, rasio hutang, kinerja keuangan, laba ditahan, sektor transportasi dan logistik*

Article history:

Received
15 October 2023

Revised
30 October 2023

Accepted
30 November 2024

Available online
30 April 2024

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INTRODUCTION

The capital structure is a structure that contains the company's funding sources which can be in the form of debt or capital. Debt is obtained from external parties, while capital can be taken from internal companies (retained earnings) or from external parties (capital from investors or share issuance). Capital structure is a variable that forms the basis of financial decisions (Sukamulja, 2021) because the choice of debt or capital sources has its own advantages and disadvantages (Sulistio and Saifi, 2017) so that capital structure becomes an important part of company management discussions to support company operational activities which have implications for the company's financial performance, including companies in the transportation and logistics sector. Based on Badan Pusat Statistik (Statistic Indonesia), the contribution of transportation and logistics sector companies to GDP is not significant as can be seen in Table 1.

Based on Table 1, the contribution of transportation and logistics sector companies to GDP is around 4-5% for the 2018–2021 period. Even though their contribution is not significant, transportation and logistics sector companies have a function that drives the wheels of the country's economy, namely moving goods or passengers from one place to another. Moreover, companies in the transportation and logistics sector have interesting things to research because there are companies in this sector that have high levels of debt but can record profits even though there are companies in the transportation and logistics sector that have low levels of debt but experience losses. The debt level is proxied by the Debt to Assets (DAR) ratio and the financial performance is proxied by Return on Assets (ROA), which are benchmarks for profitability in several companies in the transportation and logistics sector which can be seen in Table 2 based Bursa Efek Indonesia (Indonesia Stock Exchange).

Based on Table 2, there are companies in the transportation and logistics sector suffer losses (the ROA value is negative) even though the capital structure proxied by the debt ratio or DAR was low which indicated that these companies used more equity or their own capital than debt. Meanwhile, several companies that have high DAR ratios can gain profits (the ROA value is not negative). PT. Mineral Sumberdaya Mandiri, PT. Temas, and PT. Adi Sarana Armada is a transportation and logistics industry company that has a high DAR value and gain profits. PT. Hasnur Internasional Shipping and PT. Pelayaran Nelly Dwi Putri is a transportation and logistics industry company that has a low DAR value and gains profits. Meanwhile, PT. Eka Sari Lorena Transport is a transportation and logistics industry company that has a low DAR value and suffered losses. PT. Krida Jaringan Nusantara and PT. Guna Timur Raya was able to record a profit with a low DAR value in the year before the COVID-19 pandemic occurred (2018-2019), but recorded a loss in the year during COVID-19 even though PT. Mineral Resources, PT. Temas, and PT. Adi Sarana Armada was able to record profits during the COVID-19 pandemic even though it had a high level of debt or DAR. Therefore, there are differences in terms of capital structure and financial performance in transportation and logistics sector companies, this is the reason for conducting this research, where transportation and logistics sector companies that recorded profits for the 2018-2021 period are not only companies that have low levels of debt, companies that have high levels of debt can still record profits, this shows that there are also differences in the influence of capital structure on financial performance.

Research conducted by Singh and Bagga (2019) with the object of 50 companies listed on the Indian stock exchange, Zhang et al. (2022) with the object of e-commerce companies in China, Wieczorek-Kosmala et al. (2021) with the object of energy sector companies in four European countries, Agmas (2020) with the object of 30 construction sector companies in Ethiopia, and Mazanec (2023) with the object of transportation sector companies in Central Europe show that capital structure has a negative influence on financial performance. The results of different research conducted by Ayalew (2021) with the object of private banking companies in Ethiopia and Jankovic-Peric et al. (2022) with the object of 14 agro-food sector companies in Serbia shows that capital structure has a positive influence on financial performance. There is still little research conducted by previous researchers on companies in the transportation and logistics sector in case studies from other countries to be able to compare empirical results, especially with the research period when the COVID-19 pandemic occurred so this research is expected to fill the knowledge gap regarding capital structure and financial performance in transportation and logistics sector companies.

Table 1. The Impact of Transportation and Logistics on GDP

Years	2018	2019	2020	2021
Transportation and Logistic GDP (billion rupiahs)	797,777	881,505	689,577	719,632
GDP Total (billion rupiahs)	14,838,756	15,832,657	15,438,017	16,690,789
Contribution Percentage (%)	5.38	5.57	4.47	4.24

Table 2. DAR and ROA values in several transportation and logistic industry companies

Company	DAR (%)				ROA (%)			
	2018	2019	2020	2021	2018	2019	2020	2021
PT. Mineral Sumberdaya Mandiri	60	60	64	53	10	1	1	9
PT. Temas	62	64	68	62	1	3	1	17
PT. Adi Sarana Armada	72	72	72	71	4	2	1	3
PT. Hasnur Internasional Shipping	38	38	34	20	7	7	5	7
PT. Pelayaran Nelly Dwi Putri	11	12	12	11	11	10	8	9
PT. Armada Berjaya Trans	58	31	19	10	1	2	4	5
PT. Eka Sari Lorena Transport	14	14	19	22	-10	-2	-16	-12
PT. Krida Jaringan Nusantara	5	3	13	10	1	0,3	-2	-3
PT. Guna Timur Raya	23	26	26	24	1	1	-11	-6

Based on the problem background, the main objective of this research; (1) Describe the dynamics of capital structure and financial performance; (2) Analyze the influence of capital structure on financial performance in the transportation and logistics sector. Moreover, the COVID-19 pandemic occurred in 2020 which limited the company's operational activities with the government's policy of social restrictions on society so that it could reduce the company's income. Therefore, by analyzing the dynamics and influence of capital structure on financial performance, this research also aims to provide information and managerial implications for companies in the transportation and logistics sector. The expected research results in this study are to provide information regarding the influence of capital structure on financial performance in transportation and logistics sector companies which can be a consideration for company management in determining capital structure for investment activities.

METHODS

This research was conducted for 4 months starting from December 2022 to March 2023. The sample used in this research consisted of 18 companies in the transportation and logistics sector using purposive sampling techniques. The criteria for the sample studied were that the company published complete financial reports for 2018-2021, did not have negative equity, and did not have outlier values for each variable. The data period used is 2018-2021 with annual data form. The data used in this study is secondary data obtained from financial reports published by companies in the transportation and logistics sector, which were accessed through the website of the Indonesia Stock Exchange. Table 3 provides an overview of the 18 companies in the transportation and logistics sector used as research samples.

In this study, descriptive and quantitative data analysis methods were used. Descriptive analysis is used to describe the financial ratios of transportation and logistics sector companies and the dynamics of capital structure and financial performance while quantitative analysis is used to analyze the effect of capital structure on financial performance in the transportation and logistics sector. The values sought using descriptive methods are the average of each variable. The quantitative analysis method used is a multiple linear regression analysis method using panel data. Panel data regression in this study not only uses static regression, but also uses dynamic regression. The software applications used are Microsoft Excel and STATA.

Panel data regression is better at identifying and measuring effects simply and can control for individual heterogeneity and for study the dynamics of adjustment (Firdaus, 2011) so that is the reason for using panel data regression in this research. Dynamic panel data regression is used if the static panel data regression estimation results do not meet the assumption test

(normality test, multicollinearity test, heteroskedasticity test, and autocorrelation test). The approach in dynamic panel data regression consists of First-Difference GMM (FD-GMM) and System GMM (SYS-GMM). FD-GMM has limitations that can produce estimated values that are more biased than the FEM model, especially if the number of research time periods is limited (Firdaus, 2011). In the SYS-GMM model, the first differentiation equation group with level values is combined as the instrument plus the level equation group with the first difference as the instrument (Firdaus, 2011). To determine the best dynamic regression model, criteria must be met, namely unbiased, valid instruments, and consistent.

The Sargan test is used to see whether the dynamic regression model is valid or not. If the Sargan test value is more than α then there is no validation problem, where the null hypothesis states there is no validation problem. The dynamic regression model is classified as valid if the Sargan test cannot reject the null hypothesis (Firdaus, 2011). Arellano-Bond test is used to see if the dynamic regression model is consistent or not. If the Arellano-Bond test value is more than α then there is no consistent problem. The tested dynamic regression model is unbiased if the lag value of the dependent variable in the FD-GMM or SYS-GMM models is between the lag values of the dependent variable in the FEM and PLS models.

The hypothesis in this research is that there is a significant difference in the capital structure and financial performance of transportation and logistics sector companies before and during the Covid pandemic, the influence of capital structure proxied by debt ratios has a negative effect on financial performance and capital structure proxied by retained earnings has a positive effect on financial performance. The hypothesis regarding the comparison of capital structure and financial performance before and during the COVID-19 pandemic was formed because the COVID-19 pandemic prompted the government to form policies that limited community activities which also limited company operational activities which had implications for the company's financial performance so researchers assumed there were differences. Due to reduced income due to the pandemic, companies need to increase funds to finance the operational expenses they bear, which can be done using debt, resulting in changes to the capital structure in the transportation and logistics sector.

Table 3. Research samples

Code	Company	Subsector
AKSI	PT. Mineral Sumberdaya Mandiri	Delivery of Goods
HAIS	PT. Hasnur Internasional Shipping	Delivery of Goods
PURA	PT. Putra Rajawali Kencana	Delivery of Goods
JAYA	PT. Armada Berjaya Tans	Delivery of Goods
SAPX	PT. SAP Express	Delivery of Goods
NELY	PT. Pelayaran Nelly Dwi Putri	Delivery of Goods
TRUK	PT. Guna Timur Raya	Delivery of Goods
TMAS	PT. Temas	Delivery of Goods
KJEN	PT. Krida Jaringan Nusantara	Delivery of Goods
SMDR	PT. Samudera Indonesia	Delivery of Goods
TNCA	PT. Trimuda Nuansa Citrac	Delivery of Goods
ASSA	PT. Adi Sarana Armada	Passenger Transportation
BIRD	PT. Bluebird	Passenger Transportation
BPTR	PT. Batavia Proesperindo Trans	Passenger Transportation
LRNA	PT. Eka Sari Lorena Transport	Passenger Transportation
TRJA	PT. Transkon Jaya	Passenger Transportation
WEHA	PT. White Horse Group	Passenger Transportation
HELI	PT. Jaya Trishindo	Passenger Transportation

The hypothesis regarding the influence of capital structure on the company's financial performance was formed using the pecking-order capital structure theory as a basis. In the pecking-order theory, companies prioritize the use of retained earnings or internal funding to fund investment and growth of the company. If a company prioritizes the use of funding or capital sources from debt, then the company can reduce the level of profits because of the additional costs associated with funding using debt (Wieczorek-Kosmala et al. 2021). Therefore, the pecking order theory assumes that capital structure has a negative relationship with the company's profitability or financial performance (Wieczorek-Kosmala et al. 2021).

In the transportation and logistics sector, there are companies that have high debt levels but record profits, but there are companies that have low debt levels but experience losses. Moreover, the occurrence of the COVID-19 pandemic prompted government policies to limit community activities thereby reducing company operational activities which directly reduced the company's financial performance. The framework of this research is presented in Figure 1. Referring to the existing framework of thought, this study will test the following hypotheses:

$H_{1.1}$: There are significant differences in capital structure and financial performance for each subsector in the year before COVID-19 and during COVID-19

$H_{1.2}$: Capital structure using debt levels ratios have a negative effect on financial performance

$H_{1.3}$: Capital structure using retained earnings ratio have a positive effect on financial performance

The model in this is multiple linear regression referring to Mohammad et al. (2019), Amsha and Shumali (2022), Mathur et al. (2021), Chivandire et al. (2019), and Nguyen and Nguyen (2020). The research model is divided into a model using six independent variables plus one dummy variable and a model using four independent variables plus one dummy variable and the model is divided into static and dynamic regression models. The dummy variable in the research is the COVID-19 pandemic. The Covid-19 condition is situational in nature and becomes important to research as a determining factor of capital structure (Megawati et al. 2023). The static regression model with six independent variables as follows:

$$ROA_{it} = \alpha_i + \beta DAR_{it} + \beta TANG_{it} + \beta LIQ_{it} + \beta SIZE_{it} + \beta AGE_{it} + \beta RE_{it} + \beta dPCt + \varepsilon,$$

$$ROA_{it} = \alpha_i + \beta STD_{it} + \beta LTD_{it} + \beta TANG_{it} + \beta LIQ_{it} + \beta SIZE_{it} + \beta AGE_{it} + \beta RE_{it} + \beta dPCt + \varepsilon,$$

the dynamic regression model with six independent variables as follows:

$$ROA_{it} = \alpha_i + \beta ROA_{it-1} + \beta DAR_{it} + \beta TANG_{it} + \beta LIQ_{it} + \beta SIZE_{it} + \beta AGE_{it} + \beta RE_{it} + \beta dPCt + \varepsilon,$$

$$ROA_{it} = \alpha_i + \beta ROA_{it-1} + \beta STD_{it} + \beta LTD_{it} + \beta TANG_{it} + \beta LIQ_{it} + \beta SIZE_{it} + \beta AGE_{it} + \beta RE_{it} + \beta dPCt + \varepsilon,$$

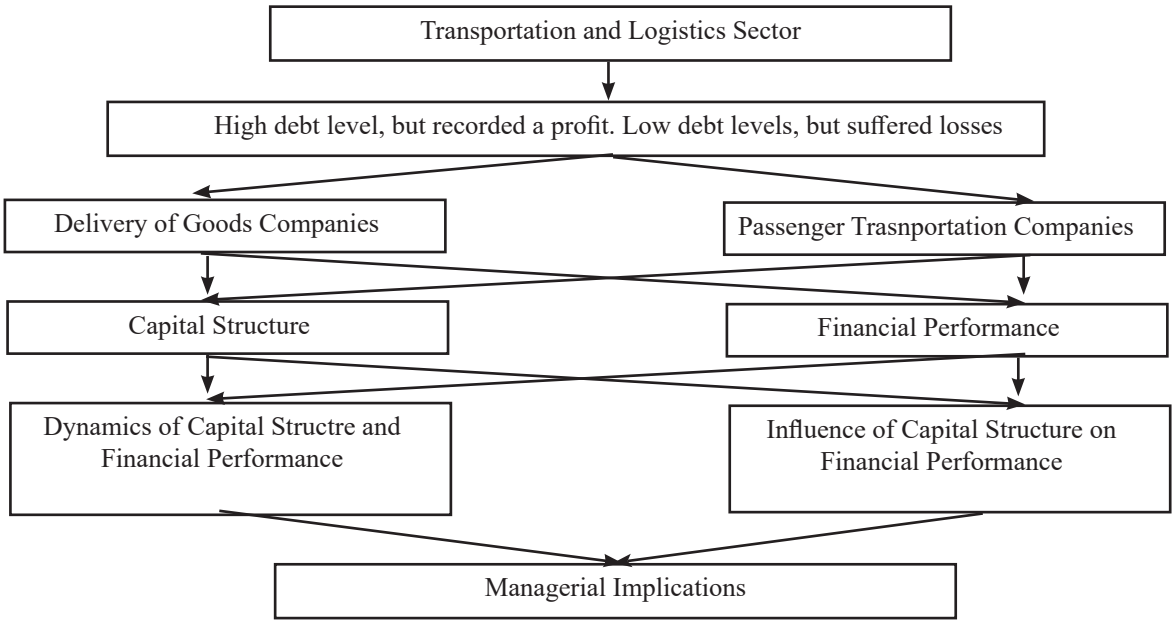

Figure 1. Framework of research

the static regression model with four independent variables as follows:

$$ROA_{it} = \alpha_i + \beta DAR_{it} + \beta TANG_{it} + \beta LIQ_{it} + \beta RE_{it} + \beta dPCt + \varepsilon,$$

$$ROA_{it} = \alpha_i + \beta STD_{it} + \beta LTD_{it} + \beta TANG_{it} + \beta LIQ_{it} + \beta RE_{it} + \beta dPCt + \varepsilon,$$

the dynamic regression model with four independent variables as follows:

$$ROA_{it} = \alpha_i + \beta ROA_{it-1} + \beta DAR_{it} + \beta TANG_{it} + \beta LIQ_{it} + \beta RE_{it} + \beta dPCt + \varepsilon,$$

$$ROA_{it} = \alpha_i + \beta ROA_{it-1} + \beta STD_{it} + \beta LTD_{it} + \beta TANG_{it} + \beta LIQ_{it} + \beta RE_{it} + \beta dPCt + \varepsilon,$$

where ROAit is the level of ROA of company$_i$ at time$_t$, αi is intercept, β is regression coefficient, DARit is the level of DAR of company$_i$ at time$_t$, STDit is the level of STD of company$_i$ at time$_t$, LTDit is the level of LTD of company$_i$ at time$_t$, TANGit is the level of the ratio of fixed assets to total assets of company$_i$ at time$_t$, SIZEit is the natural logarithm of total assets of company$_i$ at time$_t$, AGEit is the age of company$_i$ at time$_t$, REit is the level of retained earnings of company$_i$ at time$_t$, ROAit-1 is the level of ROA of company$_i$ at time$_{t-1}$, dPCt is COVID-19 pandemic dummy at time$_t$, and ε is residual.

RESULTS

The average DAR ratio for companies in the delivery of goods subsector has been below 50% for four years with the 2018-2021 period. This is different from the passenger transportation subsector companies which have an average DAR ratio of close to 50%. This shows that the average freight subsector company has a lower level of debt than the passenger transportation subsector company. The value of the capital structure ratios in companies in the transportation and logistics sector can be seen in Table 4.

Based on Table 4, the average DAR ratio of companies in the delivery of goods subsector is below 50% which indicates companies in the delivery of goods subsector use more equity than debt in carrying out their operational activities. Meanwhile, companies in the passenger transportation sub sector have an average DAR ratio of close to 50%, indicating that companies in the passenger transportation sub sector have almost the same level of debt and equity. This shows that there are differences in the level of capital structure which is proxied by the level of debt in the delivery of goods sub sector companies and the passenger transportation sub sector companies. The capital structure ratio which is proxied as retained earnings in the delivery of goods sub sector companies has a value that tends to fluctuate, while the passenger transportation sub sector companies experience a downward trend. However, the capital structure proxied by DAR in each sub sector did not experience significant differences in the year before the COVID-19 pandemic and during the COVID-19 pandemic. This can be seen in the goods delivery subsector where the DAR value decreased from 2018 to 2019, had the same value as in 2020, and experienced a decrease again in 2021. Meanwhile, in the passenger transportation sub sector there was a decrease from 2018 to 2019, but experienced an increase in 2020 and has the same value between 2020 and 2021.

The ROA ratio is a ratio that is often used by various groups such as investors or academics who want to measure a company's financial performance. This is because the ROA ratio describes a company's ability to manage its assets to generate net income. Based on Figure 2, the ROA of companies in the transportation and logistics sector is grouped into two groups of subsectors, namely the delivery of goods and passenger transportation, which experience fluctuations on average.

Table 4. Capital structure ratio in the transportation and logistics sector

Capital Structure Ratios	2018	2019	2020	2021
DAR of Delivery of Goods Company (%)	37	32	32	28
DAR of Passenger Transportation (%)	52	46	49	49
STD of Delivery of Goods Company (%)	21	17	18	16
STD of Passenger Transportation (%)	26	23	23	19
LTD of Delivery of Goods Company (%)	16	15	14	12
LTD of Passenger Transportation (%)	26	24	26	29
RE of Delivery of Goods Company (%)	12	21	18	21
RE of Passenger Transportation (%)	27	20	14	11

Figure 2 shows that there is a fluctuating trend of the ROA ratio in passenger delivery subsector companies that is more extreme than goods delivery sub sector companies. This can be seen in the average value of the ROA ratio for passenger delivery sub-sector companies, which in 2019 was still above 0%, indicating financial records, while in 2020, the average ROA ratio was below 0%, indicating recorded losses. Unlike the case with companies in the goods delivery subsector, the average ROA ratio in 2020 is still above 0%.

Table 5 shows the average ownership of companies in the transportation and logistics sector in fixed assets which illustrates the company's tangibility and the types of company investment decisions based on the current ratio which describes the company's liquidity. Based on Table 6, delivery of goods sub sector companies has a smaller tangibility ratio than passenger transportation sub sector companies. And on average the delivery of goods sub sector companies have conservative investment decisions where the liquidity ratio is greater than 1, while the passenger transportation sub sector companies have investment decisions that tend to be aggressive, even though in 2021 the average value of liquidity in passenger transportation sub sector companies is 1.

Quantitative analysis in research uses static and dynamic panel data regression methods. Dynamic regression is used if the static regression does not meet the assumption test. The results of static regression analysis using four and six independent variables cannot be used as a basis for drawing conclusions. This is because the regression results do not meet assumption tests such as the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. However, the results of dynamic regression with six independent variables cannot be used as a basis for determining conclusions because they do not meet the Sargan test and the unbiased test.

Dynamic regression using four independent variables can be the basis for drawing conclusions. The results of dynamic regression analysis using four independent variables with the object of the entire sample can be seen in Table 6. The results of dynamic regression using four independent variables with the object of the entire sample are the capital structure variable proxied are the DAR, STD, and LTD ratios which have a negative effect on financial performance. This can be seen from the negative sign on the coefficient values for the DAR, STD and LTD variables. DAR and LTD have a significant effect on ROA, while STD has an insignificant effect on ROA based on the Sig value where the Sig value of the DAR and LTD variables is smaller than the 5% significance value while the Sig value of the STD variable is greater than the 5% significance value. The capital structure proxied by the RE ratio has a positive effect on financial performance and has a significant effect on ROA because the Sig value of RE is smaller than the significance value of 5%.

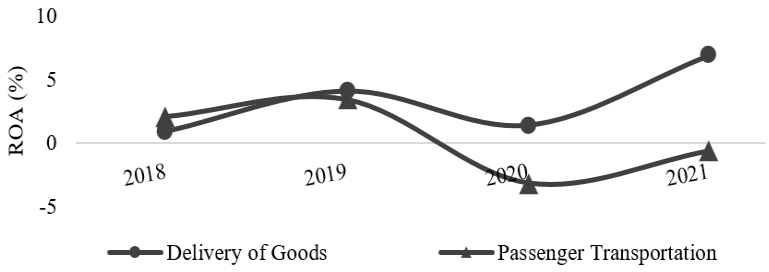

Figure 2. Chart of The ROA dynamics of the transportation and logistics sector

Table 5. Tangibility and liquidity ratio in the transportation and logistics sector

Tangibility and Liquidity Ratio	2018	2019	2020	2021
TANG of Delivery of Goods Company (%)	48	57	59	55
TANG of Passenger Transportation (%)	75	75	72	72
CR of Delivery of Goods Company	3.74	3.23	2.39	2.9
CR of Passenger Transportation	0.84	0.98	0.78	1
RE of Delivery of Goods Company (%)	12	21	18	21

The regression result on DAR has a significant negative effect on ROA in line with research conducted by Abuamsha and Shumali (2022), Agmas (2020), Mathur et al. (2021), Thi and Pung (2021), Rasheed et al. (2022), and Spitsin et al. (2020). STD has no significant negative effect on financial performance according to Mardones and Cuneo (2020), and Mohammad et al. (2019). LTD has a significant negative effect on financial performance in line with studies conducted by Wieczorek-Kosmala et al. (2021), Nga and Nguyen (2020), Nguyen and Nguyen (2020), Das and Swain (2018) and Yazdanfar and Ohman (2015)). The results of dynamic regression analysis using four independent variables with the delivery of goods subsector company object of the entire sample can be seen in Table 7.

Table 6. Dynamic regression results with the entire sample

Variables	Model I (DAR)	Model II (STD+LTD)
DAR	-0.1913225*	-
	0.001	-
STD	-	-0.1160156
	-	0.929
LTD	-	-0.2295654*
	-	0.011
TANG	-0.1108208	-0.1054722
	0.203	0.207
LIQ	-0.0013045	-0.0002697
	0.758	0.950
RE	0.1773367*	0.1873348*
	0.004	0.002
COVID-19(Dummy Variable)	-0.0324969*	-0.0309893*
	0.000	0.000
Sargan Test	0.3842	0.4070
Arellano-Bond Test	0.5109	0.4661

* Significant at the 5% level

Table 7. Dynamic regression results with the delivery of goods subsector

Variables	Model I (DAR)	Model II (STD+LTD)
DAR	-0.1812039	-
	0.130	-
STD	-	-0.1222228
	-	0.701
LTD	-	-0.2138749
	-	0.181
TANG	-0.2137609*	-0.2015126
	0.037	0.084
LIQ	-0.0060369	-0.0049878
	0.208	0.501
RE	0.1367439	0.1482943
	0.160	0.195
COVID-19(Dummy Variable)	-0.0199688	-0.0188621
	0.059	0.169
Sargan Test	0.6091	0.6179
Arellano-Bond Test	0.3855	0.3770

* Significant at the 5% level

Table 7 shows that the results of dynamic regression using four independent variables with the research object of the delivery of goods sub sector companies are the capital structure variable proxied by the DAR, STD, and LTD ratios which have a negative effect on financial performance, but DAR, STD, and LTD have no significant effect on ROA because the Sig value is greater than the significance value of 5%. The regression results on DAR, STD, and LTD have an insignificant negative effect on ROA in line with research conducted by Fauzi et al. (2022), Mardones and Cuneo (2020), Mohammad et al. (2019). The capital structure proxied by the RE ratio has a positive effect on financial performance and the RE variable has no significant effect on ROA based on the Sig value is greater than the significance value of 5%. The results of dynamic regression analysis using four independent variables with the passenger transportation sub sector company object can be seen in Table 8.

Based on Table 8, that the results of dynamic regression using four independent variables with the research object of the delivery of goods sub sector companies are the capital structure variable proxied are the DAR, STD, and LTD ratios which have a negative effect on financial performance. The capital structure proxied by the RE ratio has a positive effect on financial performance. But, the results of dynamic regression using four independent variables with the object of research on passenger transportation sub-sector companies are inconsistent estimation results because the lag coefficient values of the dependent variable in the GMM and SYS-GMM models are not between those in the PLS and FEM models.

Based on the results of the regression analysis, the effect of capital structure proxied by the variables DAR, STD, and LTD has a negative effect on financial performance proxied by ROA. The results of the analysis were carried out using a sample of all companies in the transportation and logistics sector as well as a sample group of companies in the delivery of goods and passenger transportation sub-sector. The relationship between capital structure and financial performance in companies in the transportation and logistics sector is in line with the pecking-order theory, which states that there is a negative relationship between capital structure and financial performance because it assumes that companies with large profits have less debt. Companies that have large profits prefer to use retained earnings to finance the company's investment activities in order to achieve the company's revenue target.

Table 8. Dynamic regression results with the passenger transportation subsector

Variables	Model I (DAR)	Model II (STD+LTD)
DAR	-0.4891534*	-
	0.000	-
STD	-	-0.7813439*
	-	0.000
LTD	-	-0.4497177*
	-	0.000
TANG	0.6783227*	0.8045502*
	0.000	0.000
LIQ	0.030222	0.009388
	0.102	0.639
RE	0.1732238*	0.226188*
	0.000	0.000
COVID-19(Dummy Variable)	-0.0171744*	-0.0137635
	0.042	0.200
Sargan Test	0.7972	0.1900
Arellano-Bond Test	0.2614	0.0761

* Significant at the 5% level

Manager Implications

The relationship between capital structure and financial performance in companies in the transportation and logistics sector is in line with the pecking-order theory, which states that there is a negative relationship between capital structure and financial performance because it assumes that companies with large profits have less debt. Companies that have large profits prefer to use retained earnings to finance the company's investment activities in order to achieve the company's revenue target. Therefore, companies in the transportation and logistics sector can maximize the company's retained earnings to obtain the desired level of income because the effect of capital structure based on debt levels has a negative effect on financial performance which will increase the risk of bankruptcy for companies when companies use debt, especially if the company defaults. Moreover, if the company faces unexpected things such as the COVID-19 pandemic which significantly affects operational activities. This is also evidenced by the results of the regression analysis which states that there is a significant negative effect between the COVID-19 dummy variables on financial performance. Also, the results of a descriptive analysis of financial performance before and during COVID-19 stated that there were significant differences between the financial performance of companies in the transportation and logistics sector before and during COVID-19.

The suggestion for companies in the transportation and logistics sector is to carry out a cost and benefit analysis of the use of debt for companies to be able to consider the risks faced when using debt. Excessive use of debt can reduce profits due to the high interest borne, especially if the company cannot pay off these debts which causes the company's reputation to decline. Transportation and logistics sector companies need to manage retained earnings efficiently to support their investment activities because companies in this sector have high business risks with large fixed assets.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The conclusion of this research is that there are significant differences in the capital subsector structure of goods delivery and passenger transportation. However, the capital structure as proxied by the debt level ratio in the goods and passenger delivery subsector did not experience significant changes in the year before and during the COVID-19 pandemic.

The results of the analysis of the effect of capital structure on the financial performance of companies in the transportation and logistics sector using the panel data regression method have the same results between each research model. The results of the regression analysis using the entire sample of companies in the transportation and logistics sector showed that the effect of capital structure proxied by STD had a non-significant negative effect on ROA, while DAR and LTD had a significant negative effect on ROA. The effect of capital structure proxied by RE or retained earnings has a significant positive effect on ROA. The results of the regression analysis using a sample of goods delivery sub sector companies showed that the effect of capital structure proxied by DAR, STD, and LTD had no significant negative effect on ROA and the effect of capital structure proxied by RE had an insignificant positive effect on ROA. This also applies to the sample passenger delivery sub sector companies where the results of the regression analysis show that the effect of capital structure proxied by DAR, STD, and LTD has a significant negative effect on ROA, while the effect of capital structure proxied by RE has a significant positive effect on ROA, but the regression results using a sample of companies in the passenger transportation sub sector do not meet the unbiased test.

Recommendations

Suggestions for further research are to add relevant research variables such as inflation, the rupiah exchange rate against the dollar, and vehicle fuel prices. Research on capital structure in transportation and logistics sector companies can also be developed because the results of this research provide information that the capital structure of transportation and logistics sector companies during the crisis year in which the COVID-19 pandemic occurred, did not experience significant changes.

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